

10. COST ESTIMATING AND CONSTRUCTION SCHEDULES

10.1 General

This section describes the methodology and assumptions used in the development of the Class 4 cost estimate. The estimates included in Appendix B represents an Opinion of Probable Cost (OPC) for the site modifications necessary to construct the floating OSW port. High-level estimates of some associated costs for project risk, engineering/design fees, or contingency allowance are included but may not capture all possible costs.

A preliminary Level 1 construction schedule was prepared for the development of the floating OSW port using MS Project and are included in Appendix B. The schedule includes only statutory holidays and is based on a five (5) day work week.

A Class 4 cost estimate and schedule was developed for both the Phase 1 (research size capable of supporting up to 200 MW production) and the Phase 2 (full size buildout capable of supporting commercial production) at both Sears Island and Mack Point.

10.2 Schedule Durations

10.2.1 Mack Point – Phase 1

The total construction schedule for this phase is estimated at 1.5 years.

10.2.2 Mack Point – Phase 2

The total construction schedule for this phase is estimated at 2.5 years.

10.2.3 Sears Island – Phase 1

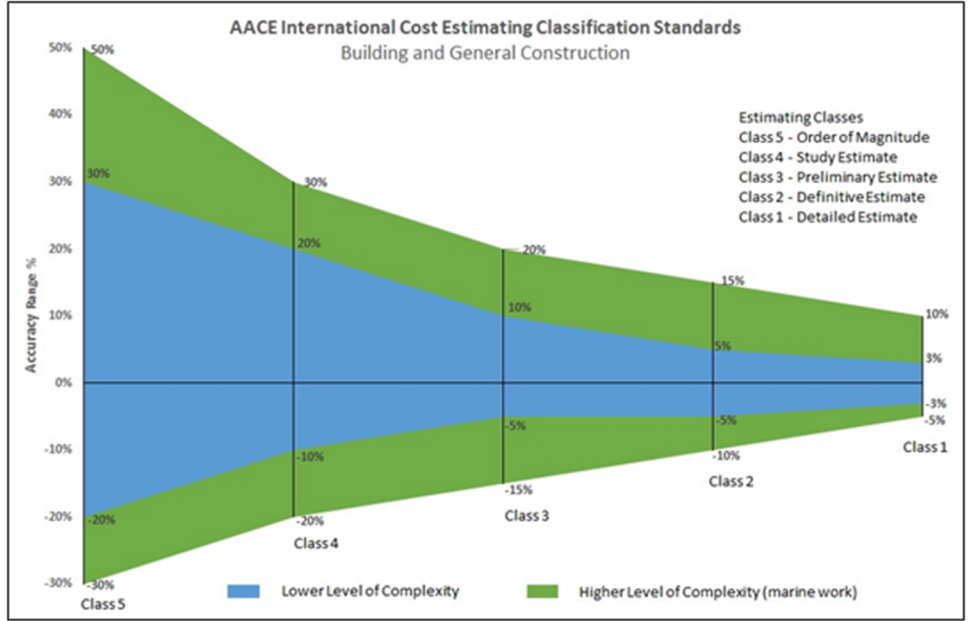
The total construction schedule for this phase is estimated at 2 years.

10.2.4 Sears Island – Phase 2

The total construction schedule for this phase is estimated at 4 years.

10.3 Estimate Class and Accuracy

The estimate is completed to the level of accuracy in accordance with the AACE (Association for the Advancement of Cost Estimating), International Recommended Practice No. 18R-97, Cost Estimate Classification System Guidelines. The accuracy of the estimate is Class 4 and is expected to achieve a range of accuracy from +50% to -30% of the total estimate cost, as shown in the graph below. This level of estimate is appropriate for concept design and planning stages of a project.



10.4 Methodology

Unless otherwise stated in the estimate details, the estimate is based on material take offs (MTOs) generated by the various engineering disciplines. The estimate is based on current and historical costs, vendor/contractor quotations from previous projects, and the estimator’s experience. Wage rates were calibrated for the Searsport, ME area. It was assumed the project would be performed under the design-bid-build model with no project labor agreement (PLA). The Phase 2 estimate for each site should be viewed as independent from the Phase 1 estimate. Each estimate was generated as if constructed from the existing conditions, i.e., Phase 2 estimate and quantities do not build off of Phase 1 estimate and quantities.

10.5 Cost Estimation Scenarios

In each scenario, there are two costs stated. The first is the ‘Estimated Construction Cost,’ which includes all material, labor, and equipment to complete the work and indirect costs including Contractor Supervision, Corporate Overhead and Profit, and Bonds and Insurance costs. The second cost is ‘Total Project Cost’ (TPC), which includes the construction cost subtotal with a project contingency of 30%.

10.5.1 Mack Point – Phase 1

The total construction cost for this phase is estimated at \$127,664,000 USD. The total project cost is estimated at \$165,963,000 USD.

10.5.2 Mack Point – Phase 2

The total construction cost for this phase is estimated at \$218,957,000 USD. The total project cost is estimated at \$284,644,000 USD.

10.5.3 Sears Island – Phase 1

The total construction cost for this phase is estimated at \$76,576,000 USD. The total project cost is estimated at \$99,548,000 USD.

10.5.4 Sears Island – Phase 2

The total construction cost for this phase is estimated at \$141,820,000 USD. The total project cost is estimated at \$184,365,000 USD.

10.6 Assumptions and Considerations

When reviewing the estimated costs included in Appendix B, it is important to note the following assumptions and/or considerations:

- a) Pricing is based on the concept design drawing set included in Appendix A.
- b) Pricing is based on US dollars, Q4 2021.
- c) The costs have been developed based on historical and current data using in-house sources.
- d) This construction cost estimate is an 'Opinion of Probable Cost' made by a consultant. In providing opinions of construction cost, it is recognized that neither the client nor the consultant has control over the cost of labor, equipment, materials, or the contractor's means and methods of determining constructability, pricing, or schedule. This opinion of construction cost is based on the consultant's reasonable professional judgement and experience and does not constitute a warranty, expressed or implied, that contractor's bids or negotiated prices for the work will not vary from the client's.
- e) The estimated man-hours reflect the type/class (Class 4) of the estimate and are based on average unit rates inclusive of materials, labor, etc. The number of man-hours has been roughly estimated by either: 1) back calculating the number of man-hours by roughly estimating the labor contribution and dividing by the average labor rate; 2) roughly estimating the man-hours required by the scheduled time to complete; or 3) a combination of 1 and 2.

10.7 Direct Costs

Direct costs are based on detailed cost buildups for labor, equipment, and supplies governed by historical or anticipated productivity derived from previous projects with similar scope, supplemented with the preliminary quantities represented by the drawings or as described in the provided text. Mobilization and demobilization for equipment and materials is assumed to be by truck and barge to and from the project site.

10.8 Indirect Costs

Indirect costs include contractor expenses for personnel, upfront project planning and procurements, onsite construction supervision, maintenance, survey, and inspection. Utilities,

construction water, electrical, and communication services, are assumed to be available on-site. Various allowances based on the total direct labor cost included in the estimate are as follows:

- Supervision (12%): Considers site supervision of the construction and includes costs such as Project Manager, Superintendents, Project & Field Engineers, Quality Control, and Office Staff.
- Bonds and Insurance (2%): Considers a nominal general liability insurance and performance bonds.
- Corporate Overhead and Profit (17%): This value is included as industry standard.

10.9 Contingency

A 30% contingency amount has been included to cover undefined items due to the level of engineering carried out at this time. The contingency is not a reflection of the accuracy of the estimates but covers items of work that will have to be performed and elements of costs that will be incurred but are not explicitly detailed or described due to the level of investigation, engineering, and estimating completed to date.