

A Cost estimate

“A cost estimate is the approximation of the cost of a program, project, or operation. The cost estimate is the product of the cost estimating process. The cost estimate has a single total value and may have identifiable component values. A problem with a cost overrun can be avoided with a credible, reliable, and accurate cost estimate” – Wikipedia

1. The AESO adopts the following methodology to develop cost estimate:

- An online platform built on Google Chrome, which is an open-source for all AESO employees
- Multiple hierarchies: to organize the complicate relations
- Multiple levels: to decouple the complication
- Organize technical & cost details of a large number of transmission components by using detail hierarchies
- Components to build facility, facilities to build project and projects to build scenario (plan)

2. Purposes of the transmission project cost estimate tool:

- Assist users to rule out and select alternatives in engineering studies
- Provide users an interactive platform to meet their needs of data (information) acquisition
- Enhance the accuracy of the communication by centralizing the data (information) sources
- Increase users' efficiency when making a decision

3. Reporting format, the transmission cost is broken down as below table:

Item	Basis		Pricing
Facility	Material	Labor	Subtotal
Line	by scope	by scope	\$M+\$L*
Substation	by scope	by scope	\$M+\$L
Telecom	by scope	by scope	\$M+\$L
Owners	preset proportion**		%x(\$M+\$L)
Distributed	preset proportion		%x(\$M+\$L)
Salvage	by scope		\$L
Other	preset proportion		%x(\$M+\$L)
Project Total	Facility + Non-facility***		\$Sum above

* M=material, L=labor

** Preset proportion is based on a statistic from the historical cost data, e.g. Owners=5% of (\$M+\$L)

*** Non-facility=Owners, Distributed, Salvage and Other

4. The estimate tool users will make decision on the key items:

- Project information, e.g. project name, number or location
- Parameters of equipment, including ratings, types, and sizes
- Quantity of equipment

5. A detailed user manual is built in the application, under the references tab:

- Estimation guide
- Application user tips