



Entellisys™

Low Voltage Switchgear

More Information About Flexibility

Change. It's inevitable – and hateful. When specs change or the system arrives on the facilities floor and you discover there's a column or a wall where the blueprint doesn't show one, Entellisys is an excellent Plan B.

Because all of Entellisys' functionality is software-based, as long as the number of circuits or the frame sizes haven't changed, Entellisys should be able to accommodate other changes, such as the need for new protection requirements, metering, diagnostics, and other functions.

- Cost calibrations: for a traditional system, the cost of adding in, say, ATO, would have to factor in labor (2 men, 4 to 10 days, \$50/hour); miscellaneous material cost (components, wiring), \$8K to \$50K, and the schedule overrun/system shutdown could be from \$10K/day to \$1M/day).

Entellisys' reduced component counts means less wear and fewer termination points. Installation should go faster and cost less – even if there are changes.

- For estimating purposes, figure two men, 1 day @ \$50/hour per ___ breakers (see Flexibility scenario).

Entellisys mobile metering is unique, letting you switch metering functions on the fly, for as long as you want – without additional CTs, wiring, or shutdown. Choose from basic volts and amperes to demand and harmonics packages.

- To install a meter on a traditional system, figure \$1000/meter up to \$15K/meter depending on the meter; miscellaneous material cost for CTs, PTs and wiring will run \$2K - \$5K, most of which goes to the instrument transformers.
- Also, factor in the cost of shutdown, schedule overrun. For new construction, a safe estimate is \$10K/day; for an operational plant, estimated costs range from \$0 to \$1M, based on lost productivity.

Entellisys offers fully field upgradeable, protection, control and monitoring without any hardware changes – and without downtime.

- The nature of the change on a traditional system drives the complexity and the cost. For instance, adding GF might require changing a trip unit, but would not require shutting down the system if the sensor is already in place. If not, then sensor costs must be factored in. Changing the trip unit alone would cost \$5K.
- If the system must be shut down (even partially), downtime and lost productivity must be calculated.