Case Notes

# Module E: Learning Curve

# Write Case Title Here

## Case Summary

*This case describes a scenario where learning curve concepts can be used to measure performance improvements of Spar Solution, Inc. (SSI) in manufacturing drilling rigs. Such information is valuable for companies to negotiate procurement contracts with SSI.*

Case Analysis *This case illustrates the usefulness of applying learning curves in procurement negotiations of complex items such as drilling rigs. Under the assumption of the learning curve, the direct labor cost of producing an item decreases as the number of items produced increases. As a result, learning curve can be factored into the value of procurement contracts since SSI is producing the drilling rigs at a steadily lower cost.*

## Sample Answers to Case Questions

1. Using the learning curve table in the module, assume that SSI experiences a learning rate of 80%. Given an overall labor rate of $4,500 per hour for design and fabrication, what should you, as the manager in charge of the final contract price, be willing to pay for the 7th unit?

Time required to produce the 7th unit = T1 x unit time coefficient value = 100,000 x 0.534 = 53,400

SSI’s cost = $4500 x 53400 = $240,300,000

2. Suppose your purchase had to be delayed for three years. What would you pay for the 10th unit if you assume a steady state unit value of 10 and a learning rate of 70%

Given: learning rate = 0.7; b =ln0.7/In2 = -0.5146

Tn = T1 x n^b

T10 = 100,000 x 10^-0.5146 = 30577.36

SSI’s cost = $4500 x 30577.36 = $137,598,124