50001 Ready Navigator
U.S. DEPARTMENT OF ENERGY

Life Cycle Cost Assessment Worksheet (example)

Energy Use: Lighting			[5]Financial Discount Rate:							
Energy Cost: $0.07/kwh			Maintenance Labor Cost: $20/hr			Unit Replacement Time: 10 min. or 0.167hr				
Options	Energy Consumption (Annual)	Initial Purchase Cost	Number of Units Needed Per Year	[1]Annualized Maintenance and Repair Cost	[2]Annual Energy Cost	Expected Operating Life	Disposal Cost	[3]Annualized Replacement Cost	Salvage Value	[4]Life-Cycle Cost
A) 100W Incandescent Bulb	440 kwh	$0.79	4.4 (440/100)(1000)/1000	$14.70 (.167)(4.4)(20)	$30.80 (440)(.07)	1000	$0	$3.48 ($0.79)(4.4)	$0	$48.98
B) 23W LED	101 kwh	$6.00	.44 (101/23)(1000)/ 10000	$1.47 (.167)(.44)(20)	$7.07 (101)(.07)	10000	$0	$2.64 ($6.00)(.44)	$0	$11.18
A)										
B)										
A)										
B)										

[1] Annualized Maintenance and Repair Cost = (Labor cost)(# hrs)(# units)

[2] Annual Energy Cost = (Annual Energy Consumption) (Energy Cost/kwh)

[3] Annualized Replacement Cost= Initial Purchase Cost/Operating Life (yrs)

[4] Lifecycle Cost = Annualized Maintenance and Repair Cost + Annual Energy Cost +Annualized Replacement Cost – Salvage Value

[5]Note: To account for time value of money, annualized costs may be discounted to present value

Prepared by:	**Date Prepared:**