MASSACHUSETTS INSTITUTE OF TECHNOLOGY Department of Nuclear Engineering

22.812 Nuclear Energy Economics and Policy Analysis (S '04)

Addendum to Problem Set #4

Due Date: March 8, 2004

Use the spreadsheet we discussed in class this morning to solve the following variant of the levelized cost problem: Instead of holding the debt-to-equity ratio constant over the life of the project, assume that the loan must be retired according to a <u>uniform repayment schedule</u> (i.e., \$300 per year.) Calculate the levelized unit cost for this problem (a) for the case of no taxes, and (b) assuming a tax rate of 38%. (For the latter case, assume straight-line depreciation for tax purposes, as before.)

Compare your results for these two cases with the results we obtained in class for a constant debt-to-equity ratio. Does the comparison conform to your expectations?