

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

TRIP REPORT

SUBJECT: Professional Development Training Course—Fundamentals of Finance
for the Technical Executive: A Two-day Program for Members of
Technical Management
Project No. 20.06002.01.011

DATE/PLACE: March 17 and 18, 2003
Cambridge, Massachusetts

AUTHOR: English Percy

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PERSONS PRESENT:

English Pearcy

BACKGROUND AND PURPOSE OF TRIP:

This trip was part of ongoing CNWRA professional development training. This course was designed to provide technical managers with background in financial analysis and financial evaluation methods. The course is offered by the MIT Sloan School of Management and was taught by Dr. David Scharfstein, a professor at the Sloan School.

SUMMARY OF PERTINENT POINTS:

This course was structured to provide a brief overview of basic financial analysis concepts, followed by more in depth information on project evaluation.

The introductory lectures moved rapidly through the basics of accounting and understanding financial statements. This included balance sheets, income statements, cash flow analyses, accrual versus cash accounting, capitalization, depreciation, and related concepts. Through a series of exercises, students learned to build valuation models from the ground up. This involved learning where to find the necessary information, how to interpret the available data, and how to estimate information when data are not available.

Of particular interest were the tools and approaches applied to situations with significant uncertainties in the analyses, and related sensitivity evaluations. Modeling research and development expense uncertainties was addressed at some length with an emphasis on use of probability adjusted research and development expenses. Monte Carlo simulations were presented as the tool of choice for evaluating risk. Such simulations were noted to be particularly valuable when key model parameters are not well known. The difficulty of estimating probability distributions and parameter limits became a subject of much discussion among course participants. In the face of sometimes vigorous challenges from the students, the instructor acknowledged that in some cases estimates would necessarily be rough. He emphasized that nevertheless, forcing the best available quantification of uncertainties is important to support informed decisions.

SUMMARY OF ACTIVITIES

The course consisted of lectures interspersed with numerous hands-on exercises. Students used calculators and laptop computers to analyze case studies. The instructor strongly encouraged participants to conduct individual analyses in addition to working in teams. Each exercise was followed by open and wide-ranging discussion sessions.

IMPRESSIONS/CONCLUSIONS

Course participants came from diverse organizations. Computer hardware and software companies, chemical manufacturing, and pharmaceutical companies, among others were well represented among the students. The concepts and approaches presented in the course were recognized by the participants as useful in many different applications.

PROBLEMS ENCOUNTERED:

None.


PENDING ACTIONS:

None.

RECOMMENDATIONS:

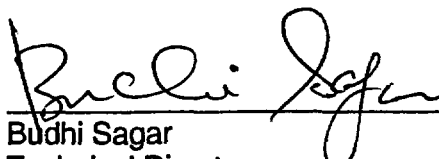
The MIT Sloan School of Management continues to be a useful source of management training courses. The course reported here is most appropriate for technical managers who already have at least some practical background in financial analysis.

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3/28/2003
Date

CONCURRENCE:


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