## **CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES**

### **TRIP REPORT**

SUBJECT: Attendance at Massachusetts Institute of Technology, Sloan School of Management Course—Fundamentals of Finance for the Technical Executive

- DATE/PLACE: March 23–24, 2006 Cambridge, Massachusetts
- AUTHOR: Patrick Mackin

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# **CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES**

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### PERSONS PRESENT:

This course was attended by 75 persons from a variety of public and private institutions and businesses. The final attendance list is attached.

### BACKGROUND AND PURPOSE OF TRIP:

The Massachusetts Institute of Technology (MIT) Sloan School of Management is a recognized leader in advanced education for business and finance. The Sloan School of Management presents a series of specialized short courses. The course, Fundamentals of Finance for the Technical Executive, is aimed at persons with a technical background who have been placed in positions that demand a working knowledge of the principles of business finance. My attendance at this course was timely in view of imminent Center for Nuclear Waste Regulatory Analyses (CNWRA) high-level waste contract renewal activities and the need to ensure that financial management for CNWRA is conducted consistent with the Federal Acquisition Regulation.

### SUMMARY OF PERTINENT POINTS:

Fundamentals of Finance for the Technical Executive was taught by Dr. Dirk Jenter and Dr. Nittai K. Bergman, both Assistant Professors of Finance for the MIT Sloan School of Management. Dr. Jenter and Dr. Bergman were excellent instructors. Their presentations were clearly linked to the text that was provided as part of the course registration fee, and their joint academic and business experience contributed to a interesting, fast-paced, no-nonsense course. The course agenda is attached.

The course was based on "*Analysis for Financial Management, Eighth Edition*," by Robert C. Higgins, a Marguerite Reimers Professor of Finance. Pre-course study assignments were defined in a course registration letter received several weeks prior to the course convening date. These assignments included reading, problem solving, and writing a brief assessment of a set of financial data. I found the assignments to be particularly useful, and without prior study, I doubt I would have benefitted from the course as extensively as I did.

The course agenda focused on basic finance concepts such as interpretation of financial statements, sustainable growth, and project planning and financing. Activities included lectures, case studies with problems, assessments conducted in randomly assigned groups,

and class discussion of results. Many of the attendees had substantial finance experience, and their insights on approaches to problem solving and analyses were valuable.

A particularly important aspect of the course was the acknowledgment and management of uncertainty in finance. Specifically, sensitivity analysis, scenario analysis, and simulation were identified as valuable tools in financial management. These approaches could be applied to cost-benefit assessments. All course materials and presentations were provided in hard copy form, and I will place these materials in the CNWRA library.

### **IMPRESSIONS/CONCLUSIONS:**

This is an excellent course. I recommend limiting future attendance to those persons who will be dealing with financial management on a daily basis. If others attend, it is likely they would lose familiarity with the material from infrequent use.

The text "*Analysis for Financial Management*" is broad and extremely well written. I am using it for personal study and will place it in the CNWRA library for use by others.

Prior preparation for the course was vital for me. Since I was unfamiliar with some of the course material, I benefitted from several readings of the material identified in the course registration letter.

#### **PROBLEMS ENCOUNTERED:**

None.

### **PENDING ACTIONS:**

I will pursue the third recommendation below.

#### **RECOMMENDATIONS:**

I recommend this course for U.S. Nuclear Regulatory Commission and CNWRA staff who move from technical positions to positions that have responsibilities for budgeting and planning.

I recommend the course text as a reference and primer for any technical staff member faced with a problem in financial management.

The CNWRA management team and the Finance Group might benefit from routine use of the financial planning and performance information that is readily available from a variety of commercially available software tools identified in the course text.

#### SIGNATURES:

5/8/0001

Patrick C. Mackin Director, Administration and Manager, CNWRA Operations

# CONCURRENCE:

Budhi Sagar, President CNWRA  $\sim$ 

<u>05/08/06</u> Date

PM:rm

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### MIT Sloan School of Management Fundamentals of Finance for the Technical Executive March 23-24, 2006

Final Attendee List

Mr. Christopher Haskins Stamford, CT

Mr. Yuhka Mera Site Technical Manager 3M Touch Systems Methuen, MA

Mr. Laird Malamed Vice President Activision Santa Monica, CA

Mr. Steven P. Maniglia Director, Engineering ADC Telecomms Nashua, NH

Mr. William Millward President & C.E.O. Addx Corporation Alexandria, VA

Ms. Diana Briganti Global Information Technology Affinion Group Trumbull, CT

Mr. Chris Carello Global Information Technology Affinion Group Trumbull, CT

Mr. Eugene L. Dieden Program Manager Affinion Group Trumbull, CT Mr. Victor Fallas Global Information Technology Affinion Group Trumbull, CT

Mr. Chris O'Neill Global Information Technology Affinion Group Trumbull, CT

Ms. Elaine C. Soltani Vice President, Research & Development Alloy Surfaces Co., Inc. Chester Township, PA

Dr. Francisco M. De La Vega Scientific Fellow Applied Biosystems Foster City, CA

Dr. Eugene G. Spier Senior Director Applied Biosystems Foster City, CA

Mr. Matthew A. Considine Director, Process Innovation AthenaHealth Watertown, MA

Dr. Navid Keshavarz-Nia Senior Technical Manager BAE Systems Reston, VA

Dr. Lindon L. Lewis Chief Technologist, Defense Operations Ball Aerospace and Technologies Corporation Broomfield, CO Mr. Muditha Weedagama Manager, Information Technology Banca Nazionale Del Laboro New York, NY

Mr. George R. Nelson Assistant Vice President, Business Development Battelle Columbus, OH

Mr. Bruce Hagen Vice President, Information Systems Bemis Manufacturing Company Sheboygan Falls, Wl

Mr. Rajesh H. Gidvani Chief Information Officer Bisys Private Equity New York, NY

Ms. Mandeep Maini Director, IT Project Management Delivery Blue Cross Blue Shield of MA Boston, MA

Mr. Tibor Purger Director, Web Technologies The Brookings Institution Washington, DC

Dr. Jake Reder Manager Cabot Corporation Billerica, MA

Mr. Andrew Eliopoulos Vice President, Research & Development Cadence Design Systems Hollis, NH

Mr. John W. Usherwood Manager, Web Services Caterpillar, Inc. Peoria, IL Mr. Taimur H. Khan Senior Vice President, Sales CellExchange Brookline, MA

Dr. Yumi Nakagawa Senior Director, Research Chiron Corporation Emeryville, CA

Mr. Arvind Jangi Chief Information Officer CitiFinancial Baltimore, MD

Mr. Stephen Bouchard General Manager Continental Microwave & Tool Co., Inc. Exeter, NH

Mr. Marc Giroux Vice President & Director, Technology Delivery Corning, Inc. Corning, NY

Ms. Erin Boyer Director, Human Resources Dyax Corporation Cambridge, MA

Mr. Michael L. Elstien Business Continuity Solutions Integrator EMC Corporation Kinnelon, NJ

Ms. Elisabetta Pierantoni Spare Parts Manager G.D. Package Machinery, Inc. Bologna, Italy

Mr. Stephen Benson Vice President, Global Strategy GMAC Commercial Mortgage Horsham, PA Dr. Wei Li Manager, Composite Tech. & Product Dev. Henkel Corporation Bay Point, CA

Mr. Gunter Gabriel Manager, e-Business Services Hilti Corporation Schaan, Liechtenstein

Dr. Greg H. Parlier Senior Systems Analyst IDA/SAIC Madison, AL

Mr. Alan Sunners Vice President, Technology Infonxx, Inc. Bethlehem, PA

Mr. Marc Rougee Vice President, World Wide Wafer Fab Ops. International Rectifier Temecula, CA

Mr. Mark T. Szkudlarek Director, Enterprise Infrastructure ITT White Plains, NY

Mr. Jaideep Jayaram Director, Research & Development The Jarden Consumer Solutions Milford, MA

Mr. Errol Kalayci Vice President, Operations Keith and Schnars, P.A. Fort Lauderdale, FL

Mr. Pasquale M. Cirullo Director, Information Systems L'Oreal USA New York, NY Mr. Paul F. Hoover Vice President, Engineering L-3 Communications Menlo Park, CA

Mr. Patrick Doering Vice President, Technology LMA, Inc. Ashland, MA

Mr. Dale Halverstadt Manager, Project Engineering Lorillard Tobacco Company Greensboro, NC

Dr. Sankar K. Mohan Director, Advanced Engineering Magna Powertrain East Syracuse, NY

Mr. Stephen P. Rappaport Proprietary Trader/Research Merrill Lynch New York, NY

Mr. Michael Fox Owner Michael Fox Photography Los Altos, CA

Mr. Keith M. Hinrichs Principal Optical Engineer MicroE Systems Natick, MA

Mr. Edward F. Ruppel Vice President, Technical Operations Micrus Endovascular Corporation San Jose, CA

Mr. Daniel Smith Vice President & General Manager MIVA Cambridge, MA Mr. Scott M. Benedict Senior Manufacturing Engineer MKS Instruments, Inc. Methuen, MA

Mr. Markku August Montonen Monteesi Helsinki, Finland

Mr. Rajiv Synghal Director, Specification & Design NAVTEQ, Inc. Chicago, IL

Ms. Ana M. Prieto Executive Director Novartis Institute for BioMedical Research Cambridge, MA

Mr. Luigi Pedalino Assistant Secretary Odyssey America Reinsurance Stamford, CT

Dr. Jeffrey S. Edmiston Research Scientist Philip Morris USA Richmond, VA

Dr. Kimberly Hodge-Bell Research Scientist Philip Morris USA Richmond, VA

Mr. Mohammad Raheel Kamal Director, Engineering QUALCOMM, Inc. San Diego, CA

Mr. Steven M. Davi Senior Vice President, Engineering SeaChange International Maynard, MA Mr. Patrick C. Mackin Director, Administration Southwest Research Institute San Antonio, TX

Mr. Richard Singer Initiatives Manager Space Telescope Science Institute Baltimore, MD

Ms. Lisa Wolff Chief Information Officer Space Telescope Science Institute Baltimore, MD

Mr. Palmi Moller Vice President, Information Technology Stora Enso Wisconsin Rapids, WI

Dr. Deborah Milkowski Director TAP Pharmaceuticals Lake Forest, IL

Dr. Hans Stork Sr. V.P. & Chief Technology Officer Texas Instruments Dallas, TX

Mr. Edward J. Gettings Sr. V.P., Product Development & Operations Unicorn HRO Florham Park, NJ

Ms. Penny Olivi Senior Administrator, Radiology University of Maryland Medical Center Baltimore, MD

Mr. Robert M. Tibi Deputy Director, Western Region U.S. National Weather Service Salt Lake City, UT Mr. Don Bohn Operating Analyst U.S. Navy Recruiting Command Millington, TN

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Mr. Patrick Leduc Director, Information Technology Vermont Student Assistance Corporation Winooski, VT

Dr. Louane E. Hann Strategic Development Program Manager Wyeth BioPharma Andover, MA

Mr. Philip Menico Chief Technology Officer XTEND Communications New York, NY

Mr. Thomas A. Blankinship Vice President, IT Yazaki North America Canton, MI

### MASSACHUSETTS INSTITUTE OF TECHNOLOGY Sloan School of Management

## FUNDAMENTALS OF FINANCE FOR THE TECHNICAL EXECUTIVE March 23-24, 2006 Hyatt Hotel, Cambridge, Massachusetts

Dirk Jenter, Assistant Professor of Finance, MIT Sloan School of Management Nittai K. Bergman, Assistant Professor of Finance, MIT Sloan School of Management

Program Agenda	
<u>Day 1</u> 7:45 a.m. – 8:30 a.m.	Registration and Continental Breakfast Ballroom
8:30 a.m. – 12:30 p.m.	Introduction and Overview
	<ul> <li>Basic Concepts of Finance</li> <li>Financial Statement analysis</li> <li>Financial Forecasting</li> <li>Sustainable Growth</li> <li>Case Study of Wilson Lumber and In-Class Group Work</li> </ul>
12:30 p.m. – 1:30 p.m.	Luncheon
1:30 p.m. – 3:00 p.m.	<ul> <li>Introduction to Project Evaluation</li> <li>Investment Evaluation Methods, Part 1</li> </ul>
3:00 p.m. – 5:30 p.m.	<ul> <li>Investment Evaluation Exercise</li> <li>Application of Investment Evaluation Methods to Sample Technology Investments</li> <li>In-Class Group Work</li> </ul>
5:30 p.m. – 6:30 p.m.	Reception
<u>Day 2</u> 8:00 a.m. – 8:30 a.m.	Continental Breakfast Ballroom
8:30 a.m 10:30 a.m.	<ul> <li>More on Project Evaluation</li> <li>Investment Evaluation Methods, Part 2</li> </ul>
10:30 a.m. – 12:30 p.m.	<ul> <li>Project Evaluation</li> <li>Diamond Chemicals PLC</li> <li>Case Study and In-Class Group Work</li> </ul>
12:30 p.m. – 1:30 p.m.	Luncheon
1:30 p.m. – 3:45 p.m.	<ul> <li>Project Evaluation</li> <li>Genzyme/Geltex Pharmaceuticals Joint Venture</li> <li>Case Study and In-Class Group Work</li> </ul>
3:45 p.m. – 4:00 p.m.	Wrap-up
4:00 p.m.	Summary and Adjournment