INTRODUCTION TO UTILITY DEPRECIATION

February 19-20, 2020
EUCI Conference Center
Plaza Tower One Conference Center
Denver, CO

“The information presented was in current situations that seemed to be relevant to different jobs and industries. There was a lot of information new to me, but it was well explained.”

Board Member, Gila River Indian Community
OVERVIEW

This course provides a foundation for understanding depreciation concepts, thinking through ratemaking implications, and making data collection choices that will impact the content and quality of the depreciation study. This course is intended to be introductory and will provide a framework for the more advanced course, Depreciation Fundamentals. The course is not simply a lecture but is intended to be interactive with the goal of addressing to the greatest extent possible, questions from the attendees. The goal of the course is that participants will become conversant on basic depreciation issues.

LEARNING OUTCOMES

- Explain the definition of depreciation, the calculation of annual depreciation expense, and the concepts associated with basic plant accounting
- Discuss the social and financial significance of accurately accruing depreciation and net salvage over the lifespan of the plant assets (i.e. the ratemaking perspective)
- Introduce the “Depreciation Cube” (Methods, Procedures, and Techniques) with a focus on the methods, techniques, and procedures most commonly used
- Introduce life analysis, survivor curves, and the concepts behind the methods used to estimate the remaining service life
- Introduce net salvage analysis and discuss its increasing significance in the development of depreciation accrual rates
- Identify the “ideal” data that should be tracked within continuing property records
- Examine depreciation accounting concepts including capitalization policies, account groupings, individual vs group (mass) asset accounting methodologies, the value of tracking contributed plant, and whether amortization is a better choice for some assets
- Explore accounting options to record fixed asset retirements and the impact of the choices upon depreciation calculations
- Examine the connection between actual data available in plant records and the choice of life and net salvage analysis methods and the reliability of the resulting analysis
- Introduce the steps and identify the useful outcomes of a depreciation study

WHO SHOULD ATTEND

- New plant accountants
- Utility financial and ratemaking staff
- Utility management wanting to get the "big picture" on depreciation
- Regulatory Staff and Commissioners who review depreciation studies
## Agenda

**Wednesday, February 19, 2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 – 8:30 am</td>
<td>Registration and Continental Breakfast</td>
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<tr>
<td>8:30 am – 5:00 pm</td>
<td>Course Timing</td>
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<tr>
<td>12:00 – 1:00 pm</td>
<td>Group Luncheon</td>
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1. **What is Depreciation?**
   - Different Perspectives
   - Historical Development
   - Defining Terms

2. **Why is Depreciation Important?**
   - Revenue Requirement
   - Social Considerations
   - Ratemaking Impacts

3. **The Depreciation Cube**
   - Methods, Procedures & Techniques
   - Depreciation Methods
   - Depreciation Procedures
   - Depreciation Techniques

4. **Property Accounting**
   - Unit Accounting
   - Group Accounting

5. **Life Analysis**
   - Average Service Life
   - Average Remaining Life
   - Probable Life
   - What about REAL Life?
   - Retirement Rate Method
   - Survivor Curves
   - Placement Bands
   - Experience Bands
   - Simulated Plant Records

6. **Net Salvage Analysis**
   - Net Salvage Analysis
   - Gross Salvage
   - Cost of Removal
   - Inflation

7. **Ideal Continuing Property Records**
   - Objectives
   - Setting up or Modifying CPRs
   - Regulatory Requirements
   - Ideal Continuing Property Records

8. **Capitalization Policy**
   - Selecting Retirement Units
   - Capitalization Policy
   - Capitalization Threshold
   - Capitalize or Expense?

9. **Selecting Account Groupings**
   - Asset Distinctions that Matter
   - Pros & Cons of Subaccounts
AGENDA
THURSDAY, FEBRUARY 20, 2020

8:00 – 8:30 am  Continental Breakfast

8:30 am – 12:00 pm  Course Timing

10) Amortization Considerations
11) Fixed Asset Retirements
   a) Various Methods
   b) Vintage
   c) FIFO
   d) LIFO
   e) Comparison
12) The Depreciation Study
   a) Planning
   b) Data Collection
   c) Calculation
   d) Evaluation
   e) Accrual Rate
   f) Recommendation
   g) Final Thoughts
13) Next Steps to Learning More

COURSE INSTRUCTOR

James Keen
Utility Consultant, Aldrich CPAs + Advisors

Mr. Keen’s public utility experience totals over 19 years, focusing primary on regulatory matters, depreciation, and rate development. Mr. Keen is a Certified Depreciation Professional experienced in preparing detailed depreciation studies for utility use and for review and approval by regulatory bodies. His experience includes analyzing financial and technical information, developing spreadsheet models, preparation of revenue requirement studies and expert testimony, and performing market analysis and economic forecasting. His expertise includes rate development, preparing utility contractual agreements, tariff modifications, depreciation studies and regulatory planning for electric, natural gas, solid waste, telephone and water and wastewater clients.

Prior to his role as a consultant, Mr. Keen worked for the Regulatory Commission of Alaska for over 15 years, serving as the chief of the engineering section for 10 years. During his time there, he was involved with managing complex regulatory rulemaking proceedings, developing regulations implementing federal and state programs, and analyzing matters of first impression. He was also the Commission’s primary depreciation analyst. He has testified before Alaska Senate and House Committees and taught workshops to utility personnel on regulatory policy, basic ratemaking, and depreciation.

Before entering the utility arena, Mr. Keen was a design engineer at Rolls-Royce North America, specializing in aero gas turbine engines for commercial and military applications. Mr. Keen has a Bachelor of Science in Mechanical Engineering from Purdue University.
OVERVIEW

This course guides utilities and energy personnel through the strategies necessary to understand the depreciation study process, meaningfully interpret depreciation study results, and develop expertise to build solid plant records upon which accurate and defensible depreciation studies can be performed. The material that will be covered in the course will include, but will not be limited to, a discussion of company historical source data used for depreciation study purposes; development of a depreciation study database; how and why historical information is analyzed; other factors considered in life and salvage analysis; a discussion of depreciation methods, procedures, and techniques for depreciation rate development; and what is included in a depreciation study report. The course is not simply a lecture, but is intended to be interactive with the goal of addressing to the greatest extent possible, questions from the attendees, to maximize the participants' understanding of the depreciation study process, results, and the application in revenue requirements.

LEARNING OUTCOMES

• Review the fundamentals of utility depreciation, including the significance of depreciation, an overview of methods, procedures and techniques, and life and net salvage analysis
• Examine plant accounting concepts and practices and the connection between property records and the depreciation study
• Interpret survivor curves and draw useful data for the purpose of analysis and life projections
• Perform actuarial analysis on in-class examples
• Develop familiarity with the Simulated Plant Records (SPR) methodology and perform basic SPR analysis on in-class examples
• Consider how life span limitations and other factors influence the development of depreciation accrual rates
• Explore the process of net salvage analysis, identifying the factors that are considered and work through examples
• Examine principles for handling contributed plant in plant accounting records and the impact on the depreciation study and resulting depreciation accrual rates
• Introduce concepts for handling reimbursements related to premature plant retirements
• Introduce Asset Retirement Obligations
• Perform basic analysis of accumulated depreciation, comparing actual and theoretical “reserve” balances
• Identify the steps of a depreciation study and common issues of contention in adversarial proceedings before regulators

WHO SHOULD ATTEND

• Regulatory Staff and Commissioners who review depreciation studies
• Recently hired accountants
• Individuals assuming property accounting and depreciation responsibilities
• Regulatory management and analysts at utilities that have had limited experience with accounting and depreciation measures
# AGENDA

## THURSDAY, FEBRUARY 20, 2020

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<tr>
<td>1:00 – 5:00 pm</td>
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- Review of Fundamental Utility Depreciation Concepts
  - What is Depreciation and Why is it Important?
  - Depreciation Methods, Procedures & Techniques
  - Life and Net Salvage Analysis
  - Property Accounting Concepts
- Plant Accounting Data
  - How Much do You Need?
  - The Connection Between Data and Depreciation Analysis
  - Data Sifting
  - Tracking Plant Assets
- Life Analysis – Advanced Concepts
  - Location vs. Mass Property Accounts
  - Survivor Curves – A More Detailed Look
  - Actuarial Analysis – From Data to Graphical Analysis
    - Review of Methodology
    - Class Example

## FRIDAY, FEBRUARY 21, 2020

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- Life Analysis – Advanced Concepts (continued)…
  - Simulated Plant Record Analysis
    - Explanation of the Methodology
    - Determining the Quality of the Results
    - Class Example
  - Life Span Analysis
    - Square Curves
    - Truncated Curves
    - Interim Retirements
  - Other Life Factors
    - Technological Obsolescence
    - Replacement Campaigns
    - Regulatory Factors
- Net Salvage – Advanced Concepts
  - Gross Salvage
  - Cost of Removal
  - Analysis Techniques and Examples
  - Other Factors to Consider
  - Reuse of Plant
AGENDA

FRIDAY, FEBRUARY 21, 2020 (CONTINUED)

- Reimbursements
  - Reimbursements for Relocation
  - Reimbursements from Insurance
- Asset Retirement Obligations (ARO)
  - Creating an ARO
  - The ARO Life Cycle
  - Comparing Cost of Removal and ARO Accounting
- Contributions in Aid of Construction
  - Basic Principles
  - Non-Refundable Advances
  - Refundable Advances
- Accumulated Depreciation Analysis
  - Book Accumulated Depreciation
  - Theoretical Accumulated Depreciation
  - Comparing and Reconciling Book and Theoretical Accumulated Depreciation
- Depreciation Study Data Request
- Issues of Contention in Depreciation Studies
  - Benchmarking Life Parameters
  - Net Salvage
  - Other Issues
- Looking into the Future
  - Technological Changes
  - Regulatory Shifts
  - Asset Management Evolution

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REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for the entirety of the course to be eligible for continuing education credit.

INSTRUCTIONAL METHODS

PowerPoint presentations and open discussion will be used in this program.

EVENT LOCATION

Plaza Tower One Conference Center
6400 S Fiddlers Green Cir.
Greenwood Village, CO 80111

The EUCI conference center is conveniently located adjacent to the Arapahoe at Village Center Light Rail Station, allowing easy access to and from DIA, Downtown, and Local Area Attractions.

NEARBY HOTELS

Each of these hotels offers a complimentary shuttle to and from the EUCI conference center.

<table>
<thead>
<tr>
<th>Hotel Name</th>
<th>Address</th>
<th>Phone Number</th>
<th>Distance Away</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springhill Suites DTC</td>
<td>7900 East Peakview Ave.</td>
<td>303-721-3321</td>
<td>.3 miles away</td>
</tr>
<tr>
<td>Wingate by Wyndham</td>
<td>8000 E. Peakview Ave.</td>
<td>303-626-2641</td>
<td>.3 miles away</td>
</tr>
<tr>
<td>Hyatt Place DTC</td>
<td>8300 E. Crescent Pkwy</td>
<td>303-804-7000</td>
<td>2.1 miles away</td>
</tr>
<tr>
<td>Hyatt Regency Denver Tech</td>
<td>7800 E. Tufts Ave.</td>
<td>303-779-1234</td>
<td>2.8 miles away</td>
</tr>
<tr>
<td>Denver Marriott Tech Center</td>
<td>4900 S. Syracuse St.</td>
<td>303-779-1100</td>
<td>3.1 miles away</td>
</tr>
</tbody>
</table>

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.2 CEUs for the course.

CPE CREDITS

CPE - EUCI is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: www.learningmarket.org.

Upon successful completion of this event, program participants interested in receiving CPE credits will receive a certificate of completion. EUCI is authorized by CPE to offer 12.5 credits for this course.

There is no prerequisite for this course. Program Level: Intermediate, Delivery Method: Group-Live, Advanced Preparation: None
PLEASE REGISTER

- **BOTH INTRODUCTION TO UTILITY DEPRECIATION AND INTERMEDIATE UTILITY DEPRECIATION COURSES**
  - FEBRUARY 19-21, 2020: US $2395
  - Early bird on or before January 31, 2020: US $2195

- **INTERMEDIATE UTILITY DEPRECIATION COURSE ONLY**
  - FEBRUARY 20-21, 2020: US $1395
  - Early bird on or before January 31, 2020: US $1195

- **INTRODUCTION TO UTILITY DEPRECIATION COURSE ONLY**
  - FEBRUARY 19-20, 2020: US $1395
  - Early bird on or before January 31, 2020: US $1195

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How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name: ___________  
Job Title: ___________

Company: ___________

What name do you prefer on your name badge?

Address: ____________  
City: _____________  
State/Province: _____________  
Zip/Postal Code: _____________  
Country: ___________

Phone: ____________  
Email: ____________

List any dietary or accessibility needs here

**CREDIT CARD INFORMATION**

Name on Card: ____________  
Account Number: ____________  
Exp. Date: ____________  
Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx): ____________  
Billing Address: ____________  
Billing City: ____________  
Billing State: ____________  
Billing Zip Code/Postal Code: ___________

**OR** Enclosed is a check for $ ____________ to cover ____________ registrations.

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Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before January 17, 2020 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices.

EUCI reserves the right to alter this program without prior notice.