

Chris R. Root

303-605-1982 (office)

720-635-5982 (cell)

9/2000 to Present **Duke Energy Field Services – Principal Engineer / Senior Project Manager**

- ◆ Led Operating Excellence Team on Plant Reliability
- ◆ Project Management of Artesia Expansion Projects (Inlet Compression, Amine and Cryogenic Debottlenecking, DCS Installation, and Acid Gas Injection)
- ◆ Front End Engineering Development (FEED) Studies – NGL Recovery, Sulfur Recovery, Waste Heat Recovery and Acid Gas Injection Projects various Plants
- ◆ Process Engineering on various projects – expertise in Cryogenic NGL Recovery, Nitrogen Rejection Units (NRU), Gas Treating Units, Acid Gas Injection (AGI), and Sulfur Recovery Units (SRU)
- ◆ Cost Estimate Development and Consulting Support including Process, Estimates, and Project

3/1999 to 9/2000 **Pearl Development Company – Manager of Engineering / Project Manager**

- ◆ Supervised Approximately 20 Person Engineering Group with 4 Direct Reports
- ◆ Employee Appraisals, Approval of Timesheets and Expenses, Complete Day-to-Day Management
- ◆ Participant in Management Meetings, Provided Budgets and Strategic Planning for Engineering Group
- ◆ Project Manager and Engineer on 225 MMscfd Treating Facility
- ◆ Engineering Review on Projects, Cost Estimate Development, and Process Engineering
- ◆ Project Manager on Overthrust Sour Gas Treating and Acid Gas Injection FEED Study, Piceance Basin Processing Estimate, an other studies and estimates

8/1981 to 3/1999 **Amoco Production Company (BP)**

Project Manager – Anschutz/Painter (Overthrust) Group (8/1993 – 3/1999)

- ◆ Led Strategic Planning for Assets including Consolidation and Other Scenarios
- ◆ Led Process Optimization Effort – Increased Recoveries and Plant Revenue \$7 MM per Year
- ◆ Provided Engineering Consulting and Review for Plants Inside and Outside Group
- ◆ Provided Consulting on Design and Assisted in Start-up of Hugoton NRU
- ◆ Provided Input to Capital and Operating Budget Planning Efforts
- ◆ Project Management of Several Projects – Cryogenic Exchanger Replacement, NRU Debottlenecking, and Fuel Gas Blending

Deputy Commissioning Supervisor – North Sea Platform (10/1992-7/1993)

- ◆ Leadership of Platform Start-up - Coordinating Operations, Construction, and Drilling Efforts

Process Engineer – Worldwide Engineering Group (8/1985 – 10-1992)

- ◆ Lead Engineer on Various Projects, Start-ups, and Studies
- ◆ Group Supervision During Manager's Extended Absences
- ◆ Engineering Consulting Role and Process Engineering – Various Projects

Engineer – Montbello District Office (8/1981 – 8/1985)

- ◆ Engineering Support for Spindle, Wattenberg, and Other Plants
- ◆ Developed and Executed Projects - Product Treating, Waste Heat Recovery, and Others

Professional Activities

- ◆ Member - GPA Research Committee Subgroup #2
- ◆ Member - Rocky Mountain Chapter GPA and National GPA
- ◆ Former President, Vice President, and Director – Rocky Mountain Chapter GPA
- ◆ Various Technical Papers (GPA, Gas Conditioning Conference, and O&GJ)
- ◆ Professional Engineer (Colorado)

Education

BS and MS in Chemical Engineering – University of Oklahoma

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 13589 Exhibit No. 11
Submitted by:
DUKE ENERGY FIELD SERVICES, LP
Hearing Date: February 9, 2006