

R. Mark Clements
Executive Director

303.762.7079
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EXPERTISE

- Generation expansion and transmission planning
- Fuel budgets, production cost modeling
- RTO and FERC policies and pricing policy
- Planning for increasing transfer path capacity
- Mergers and acquisitions
- Power supply studies and rate analysis and projections

EDUCATION

MS Electrical Engineering
University of Colorado

BS Biology
University of Colorado

BS Mechanical Engineering
University of Arizona

EXPERIENCE

E3 Consulting
Executive Director
2004-Present

ERG Consulting
Senior Consultant
2002- 2004

M2M DataCorp
Manager of Utility Sales
1999-2002

Public Service Co. of
Colorado
Manger, System Planning
1982-1999, 1970-1978

Stone & Webster
Management Consultants
Consultant
1978-1982

QUALIFICATIONS

Mr. Clements has over 34 years of experience providing generation expansion planning, production cost modeling, transmission planning, control area operations and design and consulting services to electric utilities, the steel industry and fuel suppliers in the US and Internationally. Mr. Clements was on the Board of Directors of the Western Regional Transmission Association and has been involved in the formation attempts of several ISOs/RTOs. He has testified as an expert witness on transmission, prudence, scheduling and ancillary service issues in federal cases and in Colorado and Kentucky. He has studied transfer path loading and loopflow magnitudes and recommended the construction of new facilities that increased the transfer limit and wrote CPCNs the state PUC approved. He has projected power supply rates for clients resulting from competing supplier's future construction plans. He has been involved in several mergers and acquisitions and the administration of the resulting executory contracts.

REPRESENTATIVE EXPERIENCE

Senior Consultant, ERG Consulting. Participated in the formation of the SeTrans RTO. He testified as an expert witness for a large arc furnace steel mill when the utility attempted to classify the mill as a non-conforming load. He testified as an expert witness before the Federal Energy Regulatory Commission against Enron and its affiliate in the Death Star scheduling practice. He testified as an expert witness in Federal Claims Court for a steel mill charge excessive load regulation fees for transmission service. He studied the cost advantages for a utility of terminating existing grandfathered contracts and using Network Integration Transmission Service in order to purchase IPP power at a lower cost as a Network Resource. Mr. Clements provided two filed comments to FERC in its proposed Standard Market Design ("SMD").

Manager, System Planning, Public Service Co. of Colorado. Participated in the formation of the Midwest ISO. Raised the TOT 3 transfer path limit into Colorado by approximately 50 MW by upgrading a line and justified the increase with WECC technical studies. He modeled the costs and effectiveness of different emission control technologies for an older power plant. He produced testimony on the design of the Colorado IRP rules that resulted in a rule revision. He managed the creation of the 20 year system peak demand forecast. As a *Senior Planning Engineer* he worked on the acquisition of Colorado Ute and divided the transmission system of Colorado Ute between PSCo and Tri-State G&T and then designed the control area boundary changes to move all the acquired load and generation into the PSCo control area.