

REPORT

FORENSIC INVESTIGATION AND ROOT CAUSE ANALYSIS DECEMBER 14, 2005 INCIDENT UPPER RESERVOIR DIKE TAUM SAUK PLANT FERC PROJECT NO. 2277

1.0 INTRODUCTION

This Report documents the results of a forensic investigation into the root cause of the breach of the Upper Reservoir Dike at the Taum Sauk Plant, near Lesterville, Missouri, on December 14, 2005. The investigation was conducted by Paul C. Rizzo Associates, Inc. (RIZZO) between January 2 and February 28, 2006, at the request of Union Electric Company doing business as AmerenUE (AmerenUE) as required under 18 CFR 12.10 (a)(2)(i) and in response to a specific request of the Federal Energy Regulatory Commission (FERC).

RIZZO utilized several subcontractors and has included into this report the investigative work associated with project instrumentation, performed by Siemens Power Generation, Inc. (Siemens). Siemens focused on the instrumentation and control aspects of the investigation. While the Siemens work has been integrated into this Report, their actual report to AmerenUE and RIZZO is included in *Appendix A*.

