



Integrated Resource Plan

Generation Technology Reports

Venice Combined Cycle Study

Black & Veatch, December 2002

****PUBLIC VERSION****

Generation Technology Reports for AmerenUE Integrated Resource Planning

Summary:

These reports summarize the various analyses and studies that were completed to provide generation technology inputs for the AmerenUE integrated resource planning process. The studies included assessments of various potential generation technologies to supply capacity for AmerenUE. The assessments consisted of both “screening level” and, in some cases, detailed evaluations of different generation technologies. Several of the evaluations included a comparison of technical features, as well as a comparison of costs, performance and emissions.

The eight reports, in chronological order, are:

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| 1. Venice Combined Cycle Study – Black & Veatch, December 2002 |
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2. **Strategic Siting Study** – Burns & McDonnell, September 2004
 3. **Missouri Pumped Storage Project Concept Study** – Montgomery Watson Harza, September 2004
 4. **Rush Island Unit 3 Feasibility Study** – Black & Veatch, October 2004
 5. **Rush Island Unit 3 Conceptual Cost & Performance Study** – Sargent & Lundy, October 2004
 6. **Generation Technology Assessment** – Burns & Mc-Donnell, November 2004
 7. **Nuclear Industry Overview & IRP Analysis Parameters** – Navigant Consulting, June 2005
 8. **IGCC Technology Assessment Report** – Sargent & Lundy, September 2005

Report Number: 1

Deliverable: Venice Combined Cycle Study

Date Completed: December 2002

Author: Black & Veatch

Ameren Services commissioned Black & Veatch to perform a study of the feasibility to convert the planned Venice combustion turbine installation project to a 2x1 combined cycle configuration. This study included the following elements:

- Detailed project description
- Thermal cycle definition and performance
- Major equipment list
- Capital cost estimate
- Project schedule
- O&M cost estimate
- Assessment of selected technical issues and regulatory constraints



AmerenUE

**Venice Power Plant
Combined Cycle Study
Phase 1**

B & V PROJECT No. 133211

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Revision 0
Final Issue**

**Black & Veatch Corporation
Ann Arbor, Michigan**



