Final Term Sheet

Great Plains Energy Incorporated

2.75% Notes due 2013

Issuer: Great Plains Energy Incorporated

Principal Amount: \$250,000,000

Title of Securities: 2.75% Notes due 2013

Maturity Date: August 15, 2013

Coupon (Interest Rate): 2.75%

Yield to Maturity: 2.766%

Benchmark Treasury: 1.00% due July 15, 2013

Spread to Benchmark Treasury: +195 basis points

Benchmark Treasury Price and Yield: 100-17, 0.816%

Interest Payment Dates: Semi-annually on February 15 and August 15, commencing on February 15, 2011

Price to Public: 99.954% of the principal amount, plus accrued interest, if any, from August 13, 2010

Redemption Provision: Callable at any time at a make-whole premium of the greater of (i) 100% of the principal amount or

(ii) discounted present value at Treasury Rate plus 30 basis points.

Settlement Date: August 13, 2010

CUSIP Number: 391164 AD2

Ratings: Moody's Investor Services: Baa3 (Stable Outlook)

Standard & Poor's Ratings Group: BBB- (Stable Outlook)

Joint Bookrunners: Barclays Capital Inc.

BNP Paribas Securities Corp.

Co-Managers: Deutsche Bank Securities Inc.

RBS Securities Inc. Scotia Capital (USA) Inc. U.S. Bancorp Investments, Inc.

Note: A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time. The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC Web site at www.sec.gov. Alternatively, Barclays Capital Inc. or BNP Paribas Securities Corp. can arrange to send you the prospectus if you request it by calling Barclays Capital Inc. toll-free at (888) 603-5847 or BNP Paribas Securities Corp. toll-free at (800) 854-5674.