

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K

 X ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934 for the fiscal year ended December 31, 2004

or

 TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934 for the transition period from
_____ to _____

Commission File Number

- A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

WPS Resources Corporation
Deferred Compensation Plan

- B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

WPS Resources Corporation
700 North Adams
P. O. Box 19001
Green Bay, WI 54307-9001

**WPS RESOURCES CORPORATION
DEFERRED COMPENSATION PLAN**

**STATEMENTS OF FINANCIAL CONDITION
DECEMBER 31, 2004 AND 2003
(IN THOUSANDS)**

	2004	2003
ASSETS:		
Receivable from WPS Resources Corporation	<u>\$38,223</u>	<u>\$32,935</u>
PLAN EQUITY	<u>\$38,223</u>	<u>\$32,935</u>

See notes to financial statements.

WPS RESOURCES CORPORATION
DEFERRED COMPENSATION PLAN

STATEMENTS OF INCOME AND CHANGES IN PLAN EQUITY
YEARS ENDED DECEMBER 31, 2004, 2003 and 2002
(IN THOUSANDS)

	2004	2003	2002
INCOME:			
Employer contribution credits	93	87	101
Participant deferred compensation	3,947	2,127	2,127
Deemed interest and dividend credits	2,462	2,187	1,912
Deemed net unrealized appreciation of investments	846	2,295	337
Transfer in from WPS Resources Corporation Non-Employee Director Deferred Compensation Plan	<u>-</u>	<u>4,754</u>	<u>-</u>
Total additions	7,348	11,450	4,477
DEDUCTIONS:			
Benefits paid to participants	<u>2,060</u>	<u>1,564</u>	<u>1,144</u>
Total deductions	2,060	1,564	1,144
NET INCREASE IN PLAN EQUITY	5,288	9,886	3,333
PLAN EQUITY, BEGINNING OF YEAR	<u>32,935</u>	<u>23,049</u>	<u>19,716</u>
PLAN EQUITY, END OF YEAR	<u>\$38,223</u>	<u>\$32,935</u>	<u>\$23,049</u>

See notes to financial statements.

**WPS RESOURCES CORPORATION
DEFERRED COMPENSATION PLAN**

**NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002
(DOLLARS IN THOUSANDS)**

1. DESCRIPTION OF THE PLAN

General - WPS Resources Corporation (the "Company") sponsors the WPS Resources Corporation Deferred Compensation Plan as Amended and Restated effective January 1, 2004 (the "Plan"). The Plan supercedes previous deferred compensation plans dating back to 1987. The following brief description of the Plan provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

The Plan is a non-qualified, deferred compensation plan. The Plan is an employee pension benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), although, as discussed in more detail below, the Plan is exempt from many of ERISA's substantive requirements.

Participation - The Plan is open to a select group of management and highly compensated employees of the Company, its subsidiaries, or affiliates. An employee may participate in the Plan only if designated for participation by the Compensation Committee of the Board of Directors. Once nominated, participation in the plan is entirely voluntary.

Plan Merger - During 2003 management of the Company decided to merge the WPS Resources Non-Employee Director Deferred Compensation and Deferred Stock Units Plan back into the Plan effective December 31, 2003. Accordingly, at the close of business on December 31, 2003 the WPS Resources Non-Employee Director Deferred Compensation and Deferred Stock Unit Plan was merged with and into (the "Merger") the Plan. Director account balances totaling \$4,754 were transferred from the WPS Resources Non-Employee Director Deferred Compensation and Deferred Stock Unit Plan back to the Plan as of December 31, 2003.

Participant Deferrals - Each participant can defer up to 75% of his or her base compensation, in increments of 1%. In addition, each participant can defer up to 100% of his or her annual bonus, and 100% of any long-term incentive plan performance share awards, in increments of 1%.

Employer Contribution Credits - Beginning in 2001, if a participant chooses to defer his or her annual bonus payment into the WPS Resources stock unit account, an additional 5% premium will be added as an incentive for using the stock deferral option. If deferral of base compensation and/or annual bonus under this Plan results in a reduced 401(k)/ESOP match under the Company sponsored qualified plans, participants will receive credit for the "lost" match in this plan.

Plan Termination - Although it has not expressed any intent to do so, the Company's Board of Directors has the right to amend or terminate the Plan provided that no amendment or termination may reduce or eliminate any account balance accrued to the date of such amendment or termination.

Vesting - Participants are immediately and fully vested in all contributions and earnings.

Administration - The Plan is administered by the Compensation Committee of the Board of Directors. The Committee administers and interprets the Plan and supervises preparation of the various forms and elections required pursuant to the Plan. Participants' accounts are maintained by Clark Consulting, a third party administrator. Prior to June 2001, the participant accounts were maintained by Wisconsin Public Service Corporation, a wholly owned subsidiary of the Company.

Grantor Trust - Wisconsin Public Service Corporation, a wholly owned subsidiary of the Company, established a Grantor ("Rabbi") Trust in July 1988. The Trust was most recently amended and restated in April 2004. The Trust is governed by and subject to the terms of a trust agreement entered into between the Company, as Grantor, and State Street Bank and Trust Company, the current Trustee. Although the Company maintains a Grantor Trust and may use the Trust, at its discretion, to accumulate certain assets to assist the Company in meeting its obligations under the Plan, the Plan has no investments of its own. The sole asset of the Plan is a receivable from the Company in an amount equal to the value of all participant accounts. Obligations in excess of assets held by the Grantor Trust are paid through the assets of the Company.

Participant Accounts - Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's deferrals, applicable employer contribution credits and deemed investment gains, and charged with benefit distributions, if applicable, and allocations of deemed investment losses. The deemed investment gains and losses are determined based upon the hypothetical investment options elected by the Plan participants.

Distributions - Unless the participant has selected a later commencement date, distribution of a participant's account commences within 60 days following the end of the calendar year in which the participant terminates employment or service from all participating employers. Distributions will be made in 1 to 15 annual installments, as elected by the participant. Those participants that retired or terminated prior to 2001 receive their distribution according to the plan in existence when they separated from service.

Investments - Investments represent hypothetical investments that are maintained for record keeping purposes only. Participants direct their cash deferrals into various investment fund equivalents offered by the Plan. The investment fund equivalents currently offered by the Plan to participants include mutual funds, reserve account B, and WPS Resources common stock. Reserve account B provides for an interest equivalent credit of 70% of the Company's consolidated return on common equity or a minimum return established by the Plan. While participating in the WPS Resources Corporation Deferred Compensation Plan and prior to January 1, 1996, participants were able to defer into reserve account A. Reserve account A provides for an interest equivalent credit of 100% of the Company's consolidated return on common equity. As of December 31, 2004, 2003 and 2002, hypothetical investments in WPS Resources common stock were \$19,422, \$12,326, and \$9,200 respectively.

The following is a summary of the deemed net unrealized appreciation of investments; for the years ended December 31, 2004, 2003 and 2002:

	2004	2003	2002
WPS Resources common stock	\$540	\$1,913	\$ 441
Mutual funds	<u>306</u>	<u>382</u>	<u>(104)</u>
Deemed net unrealized appreciation of investments	<u>\$846</u>	<u>\$2,295</u>	<u>\$ 337</u>

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan administrator to make estimates and assumptions that affect the reported amounts of assets, income, deductions, and changes in Plan equity. Actual results could differ from those estimates.

Receivable from the Company - As explained in Note 3 the Plan is unfunded with benefits paid solely out of the general assets of the Company. The Plan records a receivable from the Company equal to the sum of all participant account balances.

Administrative Expenses - Costs of establishing and administering the Plan are paid by the Company and not recorded within the financial statements of the Plan.

3. INCOME TAX STATUS

Because the Plan is unfunded with benefits paid solely out of the general assets of the Company, no provision for federal income taxes has been made in the accompanying financial statements. The plan is not required to maintain its assets in a trust. The plan is an unfunded employee pension benefit plan which is maintained by the Company for the purpose of providing deferred compensation for a select group of management or highly compensated employees; and the Plan is, therefore, exempt from Parts 2, 3 and 4 of Subtitle B of Title I of ERISA, which pertain to participation, vesting, funding and fiduciary responsibilities. Pursuant to regulations issued by the Secretary of Labor in 29 CFR 2520.104-23, the Plan is exempt from the reporting and disclosure provisions of Part 1 of Subtitle B of Title I of ERISA, except for the requirement to file a brief "registration statement" with the Department of Labor (which has been done) and except for the requirement to provide Plan documents to the Secretary of Labor upon request. Title IV of ERISA, relating to plan termination insurance, does not apply to the Plan. The Plan is a nonqualified plan for federal income tax purposes and is not subject to the qualification requirements of Section 401 of the Internal Revenue Code of 1986, as amended.

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SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator of the WPS Resources Corporation Deferred Compensation Plan has duly caused this Annual Report to be signed on its behalf by the undersigned hereunto duly authorized, in the City of Green Bay and the State of Wisconsin this 28th day of June, 2005.

WPS RESOURCES CORPORATION DEFERRED COMPENSATION PLAN

By: /s/ Joseph P. O'Leary
Joseph P. O'Leary
Senior Vice President and Chief Financial Officer on behalf
of WPS Resources Corporation which administers the
WPS Resources Corporation Deferred Compensation Plan

WPS RESOURCES CORPORATION

Exhibit Index to Form 11-K
for the Fiscal Year ended December 31, 2004

**Exhibit
Number**

None