

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, 2006

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:

Integrys Energy Group, Inc. Deferred Compensation Plan
(formerly known as 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:

Integrys Energy Group, Inc.
(formerly known as WPS Resources Corporation)
130 East Randolph Drive
Chicago, IL 60601

**INTEGRYS ENERGY GROUP, INC.
DEFERRED COMPENSATION PLAN**

**STATEMENTS OF FINANCIAL CONDITION
DECEMBER 31, 2006 AND 2005
(IN THOUSANDS)**

	2006	2005
ASSETS:		
Receivable from Integrys Energy Group, Inc.	<u>\$53,290</u>	<u>\$46,409</u>
 PLAN EQUITY	 <u>\$53,290</u>	 <u>\$46,409</u>

See notes to financial statements.

INTEGRYS ENERGY GROUP, INC.
DEFERRED COMPENSATION PLAN

STATEMENTS OF INCOME AND CHANGES IN PLAN EQUITY
YEARS ENDED DECEMBER 31, 2006, 2005 and 2004
(IN THOUSANDS)

	2006	2005	2004
INCOME:			
Employer contribution credits	74	94	93
Participant deferred compensation	5,621	4,049	3,947
Deemed interest and dividend credits	3,351	3,046	2,462
Deemed net unrealized appreciation of investments	<u>295</u>	<u>2,366</u>	<u>1,633</u>
Total additions	9,341	9,555	8,135
DEDUCTIONS:			
Benefits paid to participants	<u>2,460</u>	<u>2,156</u>	<u>2,060</u>
Total deductions	<u>2,460</u>	<u>2,156</u>	<u>2,060</u>
NET INCREASE IN PLAN EQUITY	6,881	7,399	6,075
PLAN EQUITY, BEGINNING OF YEAR	<u>46,409</u>	<u>39,010</u>	<u>32,935</u>
PLAN EQUITY, END OF YEAR	<u>\$53,290</u>	<u>\$46,409</u>	<u>\$39,010</u>

See notes to financial statements.

**INTEGRYS ENERGY GROUP, INC.
DEFERRED COMPENSATION PLAN**

**NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2006, 2005 AND 2004
(DOLLARS IN THOUSANDS)**

1. DESCRIPTION OF THE PLAN

General – Integrys Energy Group, Inc. (the “Company”) sponsors the Integrys Energy Group, Inc. Deferred Compensation Plan as amended and restated effective January 1, 2005 (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 number of members of the Integrys Energy Group, Inc. Board of Directors and a select group of management and highly compensated employees of the Company, its subsidiaries, and 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.

Participant Deferrals – Beginning January 1, 2005, a participant can defer 100% of his or her base earnings. Prior to that date, each participant could 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 Integrys 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.

Grantor Trust – Wisconsin Public Service Corporation, a wholly owned subsidiary of the Company, established a Grantor ("Rabbi") Trust in July 1988. The Trust was subsequently moved to Integrys Energy Group, Inc. and was most recently amended and restated in February 2005. 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 – Beginning January 1, 2005, distribution of a participant's post-2004 account will commence within 60 days following the calendar year during which the six-month anniversary of the date on which the participant terminates employment or service from the Company occurs, unless the participant has selected a later commencement date. Distribution of a participant's pre-2005 deferral will occur within 60 days following the end of the calendar year in which the participant terminates employment or service. Distributions will be made in 1 to 15 annual installments, as elected by the participant. Participants that retired or terminated prior to 2001 receive their distributions 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 Integrys 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 Integrys Energy Group, Inc. 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, 2006, 2005 and 2004, hypothetical investments in Integrys common stock were \$22,175, \$21,813, and \$19,422, respectively.

The following is a summary of the deemed net unrealized appreciation/depreciation of investments for the years ended December 31, 2006, 2005 and 2004:

	2006	2005	2004
Integrys common stock	\$ (333)	\$ 2,067	\$ 1,326
Mutual funds	<u>628</u>	<u>299</u>	<u>307</u>
Deemed net unrealized appreciation of Investments	<u>\$ 295</u>	<u>\$ 2,366</u>	<u>\$ 1,633</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.

4. PRIOR PERIOD ADJUSTMENT

Subsequent to the issuance of Integrys Deferred Compensation Plan financial statements as of and for the year ended December 31, 2004, it was determined that deemed net unrealized appreciation of investments was incorrectly reported at that date. Accordingly, a prior period adjustment of \$787,000 has been recorded as of December 31, 2004, as an increase to the previously reported net unrealized appreciation of investments of \$846,000 at that date.

5. SUBSEQUENT EVENTS

On July 8, 2006, WPS Resources entered into an agreement and plan of merger with Peoples Energy Corporation pursuant to which, among other things, Peoples Energy would become a wholly owned subsidiary. The merger was completed on February 21, 2007 and the newly formed organization was named Integrys Energy Group, Inc.

* * * * *

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator of the Integrys Energy Group, Inc. 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 21st day of June, 2007.

INTEGRYS ENERGY GROUP, INC.
DEFERRED COMPENSATION PLAN

By: /s/ Joseph P. O'Leary
Joseph P. O'Leary
Senior Vice President and Chief Financial Officer on behalf
of Integrys Energy Group, Inc. which administers the
Integrys Energy Group, Inc. Deferred Compensation Plan

INTEGRYS ENERGY GROUP, INC.

Exhibit Index to Form 11-K
for the Fiscal Year ended December 31, 2006

**Exhibit
Number**
None