

INTEGRYS ENERGY GROUP, INC.

Form 11-K

June 18, 2012

SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION
15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2011

OR

TRANSITION REPORT PURSUANT TO SECTION
15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 33-35050

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

Integrys Energy Group
Employee Stock Ownership 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.
(A Wisconsin Corporation)
130 East Randolph Street
Chicago, IL 60601-6207

REQUIRED INFORMATION

The following financial statements and schedules of the Integrys Energy Group Employee Stock Ownership Plan, prepared in accordance with the financial reporting requirements of the Employee Retirement Income Securities Act of 1974, as amended, are filed herewith.

Integrys Energy Group
Employee Stock
Ownership Plan & Trust

Financial Statements as of and for the
Years Ended December 31, 2011 and 2010,
Supplemental Schedules as of and for the
Year Ended December 31, 2011, and Reports of
Independent Registered Public Accounting Firms

INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN & TRUST

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NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Integrys Energy Group, Inc.
Employee Benefits Administrator Committee

We have audited the accompanying statement of net assets available for benefits of the Integrys Energy Group Employee Stock Ownership Plan and Trust (the "Plan") as of December 31, 2011, and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of the Plan as of and for the year ended December 31, 2010 were audited by other auditors whose report dated June 15, 2011 expressed an unqualified opinion on those statements.

We conducted our audit in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Integrys Energy Group Employee Stock Ownership Plan and Trust as of December 31, 2011, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Our audit was performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2011 and the schedule of reportable transactions for the year ended December 31, 2011, are presented for the purpose of additional analysis and are not a required part of the financial statements but are supplemental information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedules are the responsibility of the Plan's management. The supplemental information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ Schenck SC

Certified Public Accountants

Green Bay, Wisconsin
June 18, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Integrys Energy Group, Inc.
Employee Benefits Administrator Committee

We have audited the accompanying statement of net assets available for benefits of Integrys Energy Group Employee Stock Ownership Plan & Trust (the "Plan") as of December 31, 2010, and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2010, and the changes in net assets available for benefits for the year then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin

June 15, 2011

INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN & TRUST

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
AS OF DECEMBER 31, 2011 AND 2010

| | 2011 | 2010 |
|--|-----------------------|-----------------------|
| ASSETS: | | |
| Investments — at fair value: | | |
| Non-participant directed: | | |
| Common stock of Integrys Energy Group, Inc. | \$ 173,235,132 | \$ 144,835,467 |
| Money market fund | 8,442 | 4,770 |
| Participant directed: | | |
| Mutual funds | 7,297,882 | 5,815,921 |
| Collective trust funds | 4,547,886 | 3,726,547 |
| Total investments | 185,089,342 | 154,382,705 |
| Receivables: | | |
| Employer contribution receivable | 1,215,163 | 1,106,983 |
| Accrued income receivable | - | 109 |
| Total Receivables | 1,215,163 | 1,107,092 |
| NET ASSETS AVAILABLE FOR BENEFITS — at fair value | 186,304,505 | 155,489,797 |
| ADJUSTMENT FROM FAIR VALUE TO CONTRACT VALUE FOR FULLY BENEFIT-RESPONSIVE INVESTMENT CONTRACTS | | |
| | (83,550) | (63,535) |
| NET ASSETS AVAILABLE FOR BENEFITS | \$ 186,220,955 | \$ 155,426,262 |

See notes to financial statements.

INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN & TRUST

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

| | 2011 | 2010 |
|---|----------------|----------------|
| ADDITIONS: | | |
| Employer contributions | \$ 13,236,212 | \$ 12,915,862 |
| Investment income: | | |
| Dividend income | 8,480,867 | 8,097,568 |
| Interest income | 10 | 59 |
| Net appreciation in fair value of investments | 17,507,398 | 20,578,710 |
| Total investment income | 25,988,275 | 28,676,337 |
| DEDUCTIONS: | | |
| Distributions to participants | 7,944,938 | 17,339,359 |
| Dividend distributions | 484,856 | 464,841 |
| Total deductions | 8,429,794 | 17,804,200 |
| NET INCREASE | 30,794,693 | 23,787,999 |
| NET ASSETS AVAILABLE FOR BENEFITS: | | |
| Beginning of year | 155,426,262 | 131,638,263 |
| End of year | \$ 186,220,955 | \$ 155,426,262 |

See notes to financial statements.

INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN & TRUST

NOTES TO FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

1. DESCRIPTION OF THE PLAN

The following brief description of the Integrys Energy Group Employee Stock Ownership Plan & Trust (the “Plan”) is provided for general information purposes only. Participants should refer to the Plan document, as amended, for more complete information.

General — Wisconsin Public Service Corporation (the “Sponsor”), a wholly owned subsidiary of Integrys Energy Group, Inc. (the “Company” or “Integrys”), established the Plan effective January 1, 1975, as a defined contribution employee stock ownership plan. The Plan invests principally in Integrys common stock. The Plan is designed to comply with Section 4975(e)(7) and the regulations thereunder of the Internal Revenue Code of 1986, as amended (the “Code”), and is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

Overall responsibility for administering the Plan rests with the Employee Benefits Administrator Committee (the “Committee”) which consists of Integrys employees. Wells Fargo Bank N.A. (the “Trustee”) is responsible for the management and control of the Plan’s assets and has discretionary responsibility for the investments and management of such assets. The Trustee is also the recordkeeper for the Plan and maintains the individual participant accounts.

Plan Amendments — Effective May 16, 2011, the Wisconsin Public Service Corporation Employee Stock Ownership Plan and Trust changed its name to the Integrys Energy Group Employee Stock Ownership Plan and Trust.

Also, the Wisconsin Public Service Corporation Non-Administrative Savings Plan and Trust was amended to reflect the negotiated changes for Local 31 International Brotherhood of Electrical Workers (“Local 31”) participants hired or rehired on or after March 22, 2011. The Plan was amended to reflect the addition of a matching contribution in Integrys common stock for these Local 31 participants.

Eligibility — Administrative employees of the Company are generally eligible to participate in the Plan except for limited-term employees (unless limited-term employees work one year and 1,000 hours and/or are participating in one of the Company’s employee savings plans). Limited-term employees are defined under the Plan as employees of the Company or any affiliate who are hired for a limited period of time, such as temporary summer help or as a student employee who is scheduled to perform services during summer or semester breaks. Certain non-administrative employees (employees covered by a collective bargaining agreement) which have an agreement with the company are eligible to participate in the Plan. Members of Local 310, International Union of Operating Engineers (AFL-CIO) (“Local 310”) are generally eligible to participate in the plan. Certain non-administrative members from Local 18007 of the Gas Workers Union, UWUA, AFL-CIO (“Local 18007”), Local 2285 of the International Brotherhood of Electrical Workers, AFL-CIO (“Local 2285”), International

Brotherhood of Electrical Workers Local 510 (“Local 510”), Local 12295 of the United Steelworkers Union (“Local 12295”), and Local 31 also participate in the Plan. Each collective bargaining agreement sets forth which non-administrative employees are eligible to participate in the Plan.

Expenses — Investment manager fees are paid by the Plan. All other expenses are paid by Integrys and its participating subsidiaries.

Participant Accounts — Individual accounts are maintained for each of the Plan’s participants to reflect the employer contributions, as well as the participant’s share of the Plan’s income and any related administrative expenses. Allocations of interest/expense are based on the proportion that each participant’s account balance bears to the total of all participant account balances.

Vesting — Participants are immediately vested in their accounts.

Employer Contributions — Contributions to the Plan on behalf of administrative employees and certain non-administrative employees are made in Integrys common stock and match participant contributions to other plans. The matching contributions have a value equal to a 100% match on the first 5% of eligible pay that each participant defers into the Wisconsin Public Service Corporation Administrative Employees’ Savings Plan, the Wisconsin Public Service Corporation Non-Administrative Employees’ Savings Plan (for participants hired or rehired on or after April 19, 2009 for Local 510, December 18, 2009 for Local 310, January 15, 2010 for Local 12295, and March 22, 2011 for Local 31), the Peoples Energy Employee Capital Accumulation Plan (effective January 1, 2008), or the Peoples Energy Employee Thrift Plan (for participants hired or rehired on or after May 1, 2008 for Local 18007 and July 1, 2008 for Local 2285). Such contributions totaled \$9,699,633 and \$9,717,495 for 2011 and 2010, respectively.

Pursuant to a union contract with Local 310, the Company contributes to the Plan on behalf of eligible employees who are members of Local 310, 2% of a participant’s gross pay. Also, an additional percentage (as described in the collective bargaining agreement based on the participant’s date of hire/rehire) of a participant’s base pay is contributed to the Plan. Contributions pursuant to this collective bargaining agreement with Local 310 employees totaled \$3,536,579 and \$3,198,367 for 2011 and 2010, respectively.

Investment Options — Contributions to the Plan are non-participant directed into Integrys common stock. Participants have the option to diversify into mutual funds and collective trust funds within the Plan on a quarterly basis. Diversification transactions occur within a certain time period each quarter. The mutual funds and collective trust funds are managed by Wells Fargo, Fidelity, Neuberger Berman, Invesco, Loomis Sayles, Vanguard, Hartford, Dodge & Cox, American Funds, and the Northern Trust Company.

Payment of Benefits — Benefits paid to participants represent the amount paid during the year to participants who elected to receive the distribution of their account balance. Non-administrative participants may withdraw from their account shares that have been held at least 84 months. Administrative participants may withdraw from their account shares that were received prior to January 1, 2001, and held for at least 84 months. For administrative employees, shares received after January 1, 2001, may be withdrawn only upon termination or retirement.

Former employees may elect to receive distributions quarterly as described in the Plan document, or may defer distribution until the year they attain age 69. Participants who die, become disabled, retire, or otherwise terminate employment with the Company are entitled to elect a distribution as early as the next withdrawal opportunity. To the extent provided for by a qualified domestic relations order, and as determined by the administrator, a lump-sum payment may be made to an alternate payee under such order at the next withdrawal opportunity. Fractional shares and balances diversified into mutual funds or the collective trust funds are paid in cash. Amounts held in Integrys common stock are issued in full share certificates.

Dividend Distributions — Each eligible participant may elect, for dividends declared and payable on stock that is allocated to the participant account, to be paid in cash directly to the participant or be reinvested in the participant's account. Dividends that are reinvested in the participant's account are used to purchase additional shares of Integrys stock at the closing market price on the payment date of the dividend.

Voting Rights — Each participant is entitled to exercise voting rights attributable to the shares allocated to the participant's account. Each participant is notified by the Trustee prior to the time that such rights are to be exercised. The Trustee is not permitted to vote any share for which instructions have not been given by a participant.

Termination — Although it has not expressed any intention to do so, the Company reserves the right to terminate the Plan at any time, subject to Plan provisions and applicable provisions of ERISA. If the Plan were to terminate, each participant's interest in the Plan would be distributed to each participant or to each participant's beneficiary as prescribed by the Plan and ERISA at the time of termination. Upon termination of the Plan, the Committee shall direct the Trustee to pay all liabilities and expenses of the Plan.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

Investment Valuation and Income Recognition — The Plan's investments are stated at fair value. See Note 5 for discussion of fair value measurements. Investments in Integrys common stock are stated at fair market value based on the closing price reported by the New York Stock Exchange at year end. Mutual fund investments are valued as determined by the Trustee by reference to published market data. The collective trust funds are stated at fair value as determined by the issuer of the collective trust based on the fair market value of the underlying investments. The underlying investments in the Wells Fargo Stable Return Fund N4 are stated at fair value and are then adjusted by the issuer to contract value. There are no reserves against contract value for credit risk of the contract issuer or otherwise.

Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment in the Wells Fargo Stable Return Fund N4 at contract value. Contract value represents contributions made to the fund, plus earnings, less participant withdrawals.

The Northern Trust Company collective trust funds invest primarily in traded securities and have a variety of investment strategies including equity funds, fixed income funds and balanced

funds. There are no redemption notice restrictions for the assets managed by Wells Fargo and Northern Trust.

Dividends are recorded on the ex-dividend date. Interest income is recorded on an accrual basis. Purchases and sales of securities are recorded on a trade-date basis.

Management fees and operating expenses charged to the Plan for investments in mutual funds and collective trust funds are deducted from income earned on a daily basis and are not separately reflected. Consequently, management fees and operating expenses are reflected as a reduction of investment return for such investments.

Contributions Receivable — The Plan records employer contributions receivable when earned by the participants.

Operating Expenses — All expenses of maintaining the Plan are initially paid by the Company, with reimbursement from affiliates for their share of these expenses, and thus are not reflected in the Plan's financial statements.

Payment of Benefits — Benefit payments to participants are recorded upon distribution. Benefits totaling \$876,812 were due to participants who have withdrawn but not received payment as of December 31, 2011.

Use of Estimates — The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires Plan management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Risks and Uncertainties — The Plan utilizes various investment instruments, but is primarily invested in shares of Integrys common stock. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Subsequent Events — Plan management has evaluated events and transactions for potential recognition or disclosure in the financial statements through the date on which the financial statements were issued.

New Accounting Pronouncements — In January 2010, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2010-06, Fair Value Measurements and Disclosures, which amends ASC 820, Fair Value Measurements and Disclosures, adding new disclosure requirements for Levels 1 and 2, separate disclosures of purchases, sales, issuances, and settlements relating to Level 3 measurements and clarification of existing fair value disclosures. ASU No. 2010-06 is effective for periods beginning after December 15, 2009, except for the requirement to provide Level 3 activity of purchases, sales, issuances, and settlements on a gross basis, which will be effective for fiscal years beginning after December 15, 2010. The Plan prospectively adopted the new guidance in 2010, except for the Level 3 reconciliation disclosures, which were required in 2011. The adoptions in 2010 and 2011 did not materially affect the Plan's financial statements.

In May 2011, the FASB issued ASU 2011-04 amending ASC Topic 820 Fair Value Measurement and Disclosures to achieve common fair value measurement and disclosure requirements in U.S. Generally Accepted Accounting Principles and International Financial Reporting Standards. This will be effective for the Plan beginning January 1, 2012. The adoption is not expected to materially affect the Plan's financial statements.

3. INVESTMENTS

The Plan is primarily invested in shares of Integrys common stock. These shares are held in a bank-administered trust fund. This is the only investment that represents 5% or more of the Plan's net assets. The values of shares held at December 31, 2011 and 2010, are as follows:

| | 2011 | 2010 |
|---|----------------|----------------|
| Common stock of Integrys Energy Group, Inc.*, 3,197,400.000 shares at \$54.18 per share and 2,985,682.675 shares at \$48.51 per share, respectively | \$ 173,235,132 | \$ 144,835,467 |

*Party-in-interest

The investment in Integrys common stock is nonparticipant directed.

During 2011 and 2010, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in value as follows:

| | 2011 | 2010 |
|---|----------------------|----------------------|
| Common stock of Integrys Energy Group, Inc. | \$ 17,810,352 | \$ 19,925,714 |
| Mutual funds | (358,345) | 487,384 |
| Collective trust funds | 55,391 | 165,612 |
| Total | \$ 17,507,398 | \$ 20,578,710 |

4. NON-PARTICIPANT DIRECTED INVESTMENTS

The Plan includes participant directed and non-participant directed investments. Information about the net assets and the significant components of the changes in net assets relating to the non-participant directed investments is as follows:

| | 2011 | 2010 |
|---|-----------------------|-----------------------|
| Net assets: | | |
| Common stock of Integrys Energy Group, Inc. | \$ 173,235,132 | \$ 144,835,467 |
| Money market fund | 8,442 | 4,770 |
| Employer contribution receivable | 1,215,163 | 1,106,983 |
| Total | \$ 174,458,737 | \$ 145,947,220 |

| | 2011 | 2010 |
|---|----------------------|----------------------|
| Changes in net assets: | | |
| Contributions | \$ 13,236,212 | \$ 12,915,862 |
| Dividend income | 8,342,828 | 7,991,502 |
| Interest income | 10 | 59 |
| Net appreciation | 17,810,352 | 19,925,714 |
| Distributions to participants | (6,621,552) | (14,427,803) |
| Dividend distributions | (484,856) | (464,841) |
| Transfers to participant-directed investments | (3,768,748) | (8,150,814) |
| Total | \$ 28,514,246 | \$ 17,789,679 |

5.

FAIR VALUE MEASUREMENTS

The Plan classifies its investments into Level 1, which refers to securities valued using quoted prices from active markets for identical assets; Level 2, which refers to securities not traded on an active market but for which observable market inputs are readily available; and Level 3, which refers to securities valued based on significant unobservable inputs. Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The following table sets forth by level within the fair value hierarchy a summary of the Plan's investments measured at fair value on a recurring basis at December 31, 2011 and 2010.

Plan management evaluates the significance of transfers between levels based upon the nature of the financial instrument and size of the transfer relative to total net assets available for benefits. For the years ended December 31, 2011 and 2010, there were no transfers in or out of levels 1, 2, or 3.

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| | Fair Value Measurements at December 31, 2011, Using | | | Total |
|---|--|--------------|---------|----------------|
| | Level 1 | Level 2 | Level 3 | |
| Integrys Energy Group, Inc. common stock | \$ 173,235,132 | \$ - | \$ - | \$ 173,235,132 |
| Cash and cash equivalents | 8,442 | - | - | 8,442 |
| Mutual funds: | | | | |
| Equity | 3,777,564 | - | - | 3,777,564 |
| Balanced | 2,361,333 | - | - | 2,361,333 |
| Fixed Income | 1,158,985 | - | - | 1,158,985 |
| Total mutual funds | 7,297,882 | - | - | 7,297,882 |
| Collective trusts funds: | | | | |
| Equity | - | 944,357 | - | 944,357 |
| Balanced | - | 66,186 | - | 66,186 |
| Fixed Income | - | 240,319 | - | 240,319 |
| Stable Return Fund | - | 3,297,024 | - | 3,297,024 |
| Total collective trust funds | - | 4,547,886 | - | 4,547,886 |
| | \$ 180,541,456 | \$ 4,547,886 | \$ - | \$ 185,089,342 |

| | Fair Value Measurements at December 31, 2010, Using | | | Total |
|---|--|-----------|---------|----------------|
| | Level 1 | Level 2 | Level 3 | |
| Integrys Energy Group, Inc. common stock | \$ 144,835,467 | \$ - | \$ - | \$ 144,835,467 |
| Cash and cash equivalents | 4,770 | - | - | 4,770 |
| Mutual funds: | | | | |
| Equity | 3,041,434 | - | - | 3,041,434 |
| Balanced | 1,848,807 | - | - | 1,848,807 |
| Fixed Income | 925,680 | - | - | 925,680 |
| Total mutual funds | 5,815,921 | - | - | 5,815,921 |
| Collective trust funds: | | | | |
| Equity | - | 509,716 | - | 509,716 |
| Balanced | - | 77,853 | - | 77,853 |
| Fixed Income | - | 187,505 | - | 187,505 |
| Stable Return Fund | - | 2,951,473 | - | 2,951,473 |
| Total collective trust funds | - | 3,726,547 | - | 3,726,547 |

\$ 150,656,158 \$ 3,726,547 \$ - \$ 154,382,705

6.

STABLE VALUE FUND

The stable value fund (the “Fund”) is a collective trust fund sponsored by Wells Fargo. The beneficial interest of each participant is represented by units. Units are issued and redeemed daily at the Fund’s constant net asset value (NAV) of \$1 per unit. Distribution to the Fund’s unit holders is declared daily from the net investment income and automatically reinvested in the Fund on a monthly basis, when paid. It is the policy of the Fund to use its best efforts to maintain a stable net asset value of \$1 per unit; although there is no guarantee that the Fund will be able to maintain this value.

Participants ordinarily may direct the withdrawal or transfer of all or a portion of their investment at contract value. Contract value represents contributions made to the Fund, plus earnings, less participant withdrawals and administrative expenses. The Fund imposes certain restrictions on the Plan, and the Fund itself may be subject to circumstances that affect its ability to transact at contract value. Plan management believes that the occurrence of events that would cause the Fund to transact at less than contract value is not probable.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to the plan documents (including complete or partial plan termination or merger with another plan), (2) changes to the Plan’s prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the plan sponsor or other plan sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the Plan, or (4) the failure of the Trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The plan administrator believes that the occurrence of any events that would limit the Plan’s ability to transact at contract value with participants are not probable of occurring.

7. EXEMPT PARTY-IN-INTEREST TRANSACTIONS

Certain Plan investments are shares of a money market fund and a collective trust fund managed by the Trustee and, therefore, these transactions qualify as exempt party-in-interest transactions. Fees paid by the Plan for investment management services were included as a reduction of the return earned on each fund.

At December 31, 2011 and 2010, the Plan held 3,197,400.000 and 2,985,682.675 shares, respectively, of common stock of Integrys, parent company of the sponsoring employer, with a cost basis of \$128,354,093 and \$115,399,769, respectively. During the years ended December 31, 2011 and 2010, the Plan recorded dividend income of \$8,342,828 and \$7,991,502, respectively, from investments in common stock of Integrys.

8. FEDERAL INCOME TAX STATUS

The Internal Revenue Service has determined and informed the Sponsor by a letter dated March 5, 2003, that the Plan and related trust were designed in accordance with applicable regulations of the Code. The Plan has been amended since receiving the determination letter. However, the Sponsor and the Plan administrator believe that the Plan is currently designed and operated in compliance with applicable requirements of the Code and the Plan and related trust continue to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the plan and recognize a tax liability (or asset) if the organization has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The plan administrator has analyzed the tax positions taken by the plan, and has concluded that as of December 31, 2011, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The plan administrator believes it is no longer subject to income tax examinations for years prior to 2008.

9. RECONCILIATION TO FORM 5500

As of December 31, 2011 and 2010, the Plan reported (\$83,550) and (\$63,535), respectively, of adjustments from fair value to contract value for fully benefit-responsive investment contracts. Fully benefit-responsive investment contracts must be shown at fair value on Form 5500.

A reconciliation of net assets available for benefits per the financial statements to the Form 5500 as of December 31, 2011 and 2010, and for the year ended December 31, 2011 is as follows:

| | 2011 | 2010 |
|---|----------------|----------------|
| Statements of net assets available for benefits: | | |
| Net assets available for benefits per financial statements | \$ 186,220,955 | \$ 155,426,262 |
| Adjustment from contract value to fair value for fully benefit-responsive guaranteed investment contracts | 83,550 | 63,535 |
| Net assets available for benefits per Form 5500 — at fair value | \$ 186,304,505 | \$ 155,489,797 |
| Statement of changes in net assets available for benefits: | | |
| Increase in net assets per the financial statements | \$ 30,794,693 | |
| Change in adjustment from contract value to fair value for fully benefit-responsive guaranteed investment contracts | 20,015 | |
| Net income per Form 5500 | \$ 30,814,708 | |

10. SUBSEQUENT EVENT

The Wisconsin Public Service Corporation Non-Administrative Savings Plan and Trust was amended to reflect the negotiated changes for Local 417 of the Utility Workers of America participants hired on or after February 16, 2012 including automatic enrollment and the addition of Roth Contributions. The Plan was amended to reflect the addition of a matching contribution in Integrys stock for these Local 417 participants.

* * * * *

SUPPLEMENTAL SCHEDULES

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INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN & TRUST

FORM 5500, SCHEDULE H, PART IV, LINE 4I SCHEDULE OF ASSETS (HELD AT END OF YEAR)
AS OF DECEMBER 31, 2011
EIN/PN:39-0715160/003

| (a) | (b) | (c) | (d) | (e) |
|-----|--|-------------------------------------|----------------|------------------|
| | Identity of Issue | Shares or par value | Cost | Current Value |
| | Nonparticipant directed: | | | |
| * | Integrys Energy Group, Inc. common stock | 3,197,400 | \$ 128,354,093 | \$ 173,235,132 |
| | Wells Fargo Short-Term Investment | | | |
| * | Money Market Fund | 8,442 | 8,442 | 8,442 |
| | | Total nonparticipant directed | \$ 128,362,535 | 173,243,574 |
| | Participant directed: | | | |
| | Mutual Funds: | | | |
| | American Funds Growth Fund of America | 12,707 | | 364,439 |
| | Dodge & Cox Stock Fund | 5,983 | | 608,152 |
| | Fidelity Balanced Fund | 25,959 | | 472,197 |
| | Hartford Small Company HLS IA Fund | 10,390 | | 177,354 |
| | Invesco International Growth Fund | 28,894 | | 739,981 |
| | Loomis Sayles Small Cap Value Fund | 21,789 | | 569,341 |
| | Neuberger Berman Partners Fund | 14,493 | | 352,748 |
| | Northern Trust Company Foreign Equity Fund | 43,341 | | 315,524 |
| | Vanguard Total Stock Market Index Fund | 20,768 | | 650,025 |
| | Vanguard Total Bond Market Index Fund | 105,362 | | 1,158,985 |
| | Vanguard Target Retirement Fund | 5,603 | | 64,600 |
| | Vanguard Target Retirement 2005 Fund | 6,702 | | 80,290 |
| | Vanguard Target Retirement 2015 Fund | 45,500 | | 559,650 |
| | Vanguard Target Retirement 2025 Fund | 49,662 | | 609,354 |
| | Vanguard Target Retirement 2035 Fund | 29,186 | | 365,117 |
| | Vanguard Target Retirement 2045 Fund | 16,327 | | 210,125 |
| | Total mutual funds | | | 7,297,882 |
| | Collective Trust Funds: | | | |
| | Northern Trust Company Balanced Fund | 396 | | 66,186 |
| | Northern Trust Company Bond Fund | 1,425 | | 240,319 |
| | Northern Trust Company Mid Cap Equity Fund | 1,690 | | 332,073 |
| | Northern Trust Company S&P 500 Equity Fund | 743 | | 106,235 |
| | Northern Trust Company S&P 500 Growth Fund | 1,387 | | 197,868 |
| | Northern Trust Company S&P 500 Value Fund | 813 | | 116,185 |

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| | | |
|--|----------------------------|-----------------------|
| Northern Trust Company Small Cap Equity Fund | 972 | 191,996 |
| * Wells Fargo Stable Return Fund | 68,868 | 3,297,024 |
| Total collective trust funds | | 4,547,886 |
| | Total participant directed | 11,845,768 |
| TOTAL INVESTMENTS | | \$ 185,089,342 |

* Indicates a party-in-interest

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INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN & TRUST

FORM 5500, SCHEDULE H, PART IV, LINE 4J — SCHEDULE OF REPORTABLE TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2011
EIN/PN:39-0715160/003

| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
|---------------------------------|-------------------------|-------------------|------------------|-----------------|--|------------------|--|-----------------------|
| Identity of Party Involved | Description of Asset | Purchase Price | Selling Price | Lease rental | Expense Incurred With Transaction | Cost of Asset | Current Value of Asset on Transaction Date | Net Gain or (Loss) |
| SINGLE IN SAME SECURITY | | | | | | | | |
| None. | | | | | | | | |
| SERIES IN SAME SECURITY | | | | | | | | |
| Integrys Energy Group, Inc.* | Common stock | \$7,941,778 | | | \$2,341 | | \$7,941,778 | |
| Integrys Energy Group, Inc.* | Common stock | | \$3,964,759 | | \$1,652 | \$3,136,702 | \$3,964,759 | \$ 828,057 |

*Party-in-interest

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator of the Integrys Energy Group Employee Stock Ownership 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 18th day of June 2012.

INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN
PLAN ADMINISTRATOR

/s/ Charles A. Cloninger
Charles A. Cloninger
Member Plan Administrator Committee

/s/ Diane L. Ford
Diane L. Ford
Member Plan Administrator Committee

/s/ William J. Guc
William J. Guc
Member Plan Administrator Committee

/s/ William D. Laakso
William D. Laakso
Member Plan Administrator Committee

/s/ Joseph P. O'Leary
Joseph P. O'Leary
Member Plan Administrator Committee

EXHIBIT INDEX

INTEGRYS ENERGY GROUP
EMPLOYEE STOCK OWNERSHIP PLAN

FORM I I -K

| Exhibit No. | Exhibit | Page Number in Sequentially Numbered Form I I-K |
|-------------|----------------------------------|--|
| 23.1 | Consent of Schenck SC | |
| 23.2 | Consent of Deloitte & Touche LLP | |
