
**UNITED STATES
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 Plan year ended December 31, 2010

OR

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

For the transition period from _____ to _____

Commission File Number 1-3523

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

**WESTAR ENERGY, INC.
EMPLOYEES' 401(k) SAVINGS PLAN**

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

**WESTAR ENERGY, INC.
818 South Kansas Avenue
Topeka, Kansas 66612**

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**Westar Energy, Inc.
Employees' 401(k) Savings
Plan**

*Financial Statements as of December 31, 2010 and 2009,
and for the Year Ended December 31, 2010,
Supplemental Schedule as of December 31, 2010, and Report of
Independent Registered Public Accounting Firm*

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WESTAR ENERGY, INC. EMPLOYEES' 401(k) SAVINGS PLAN

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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 Participants and the Investment and Benefits Committee of the
Westar Energy, Inc. Employees' 401(k) Savings Plan
Topeka, Kansas

We have audited the accompanying statements of net assets available for benefits of the Westar Energy, Inc. Employees' 401(k) Savings Plan (the "Plan") as of December 31, 2010 and 2009, and the related statement of changes in net assets available for benefits for the year ended December 31, 2010. 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 audits.

We conducted our audits 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 audits 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 audits provide 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 2009, and the changes in net assets available for benefits for the year ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule listed in the table of contents is presented for the purpose of additional analysis and is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This schedule is the responsibility of the Plan's management. Such schedule has been subjected to the auditing procedures applied in our audit of the basic 2010 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

/s/ DELOITTE & TOUCHE LLP

Kansas City, Missouri
June 27, 2011

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EMPLOYEES' 401(k) SAVINGS PLAN****STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2010 AND 2009**

	2010	2009
ASSETS		
Participant-directed investments:		
Mutual funds	\$334,932,162	\$292,734,011
Vanguard Retirement Savings Trust Fund	61,085,445	54,485,684
Westar Energy Common Stock Fund	29,849,252	28,262,835
Total Investments	<u>425,866,859</u>	<u>375,482,530</u>
Notes Receivable from Participants	9,981,052	9,774,764
Dividends receivable	369,258	397,824
Total Assets	<u>436,217,169</u>	<u>385,655,118</u>
NET ASSETS AVAILABLE FOR BENEFITS AT FAIR VALUE	436,217,169	385,655,118
Adjustment from fair value to contract value for fully benefit-responsive stable value fund (Note 2)	(2,405,429)	(1,177,881)
NET ASSETS AVAILABLE FOR BENEFITS	<u>\$433,811,740</u>	<u>\$384,477,237</u>

The accompanying notes are an integral part of these financial statements.

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EMPLOYEES' 401(k) SAVINGS PLAN****STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2010**

Investment income:	
Interest and dividend income	\$ 9,400,638
Net appreciation in fair value of investments	35,470,136
Total Investment Income	44,870,774
Contributions:	
Employer	6,836,072
Participant	17,142,574
Rollover	679,825
Total Contributions	24,658,471
Interest income on notes receivable from participants	569,864
Total Additions	70,099,109
Benefits paid to participants	20,595,099
Administrative expenses	169,507
Total Deductions	20,764,606
INCREASE IN NET ASSETS	49,334,503
NET ASSETS AVAILABLE FOR BENEFITS	
Beginning of Year	384,477,237
End of Year	\$433,811,740

The accompanying notes are an integral part of these financial statements.

**WESTAR ENERGY, INC. EMPLOYEES' 401(K) SAVINGS PLAN
NOTES TO THE FINANCIAL STATEMENTS AS OF DECEMBER 31, 2010 AND 2009, AND
FOR THE YEAR ENDED DECEMBER 31, 2010**

1. NATURE OF OPERATIONS

The following description of the Westar Energy, Inc. (the "Company") Employees' 401(k) Savings Plan (the "Plan") is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General - The Plan is a defined contribution plan, designed to provide benefits for eligible employees of the Company upon retirement or earlier termination of employment. The Chief Executive Officer of the Company appoints an Investment and Benefits Committee consisting of at least five members to administer the Plan on behalf of the Company. Vanguard Fiduciary Trust Company serves as the trustee of the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

Eligibility - An employee becomes eligible to participate in the Plan as of the first day of the calendar month following commencement of active employment or re-employment and/or as specified within the Plan document. Participants are eligible for the Company matching contribution following the completion of one year of service, as defined by the Plan.

Contributions - Participants of the Plan may contribute between 1 to 50 percent of earnings as defined by the Plan. All employees who are eligible to make elective deferrals under the Plan and have attained age 50 are eligible to make catch-up contributions in accordance with the Plan document. In addition to or instead of pretax contributions, participants can elect to make Roth elective deferrals. In addition to or instead of pretax and/or Roth contributions, participants were able to make after-tax contributions of between 1 percent and 4 percent of earnings, as defined by the Plan. However, effective March 1, 2009, after-tax contributions were discontinued, and no future after-tax contributions shall be permitted under the Plan on or after that date. Participants may also contribute amounts representing distributions from other qualified employee benefit plans. Participants direct the investment of their contributions and Company matching contributions into various investment options offered by the Plan. The Plan currently offers 21 mutual funds (including 12 target-date retirement funds), a common/collective trust fund and a Company stock fund as investment options for participants. Contributions up to the first 6 percent of a participant's earnings, as defined by the Plan, are matched 75 percent by the Company. The Company matching contribution may be made in either cash or in Company common stock, generally at the option of the Company. Participants are immediately vested in both their contributions and Company contributions and earnings thereon. Contributions are subject to certain limitations. Active participants are allowed to make additional contributions each quarter to meet the maximum contribution percentage. These contributions are considered in determining matching employer contributions. Company matching contributions are suspended for a period of six months in the event that a participant withdrew money from their after-tax account and/or the Company match account. Company matching contributions are also suspended in the event a participant received a hardship withdrawal. The Plan does not allow additional contribution, transfer, or rollover of monies into the Company stock fund if the value of the participant's investment in the Company stock fund equals or exceeds 15% of the participant's account.

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Payment of Benefits - Benefits are recorded when paid. Upon retirement, death, disability or termination of employment, all vested balances are paid to the participant or the participant's beneficiaries in accordance with Plan terms.

Participant Accounts - A separate account is maintained for each participant. Allocations to participant accounts for employer and employee contributions are made when the contributions are received by the trustee. Allocations to participant accounts for the net of interest, dividends, realized and unrealized changes in investment gains and losses and Plan expenses are made when such amounts are earned or incurred.

Participant Loans - Participants are permitted to borrow a specified portion of the balance in their individual account. Loan interest rates and terms are established by the Investment and Benefits Committee. Loans are evidenced by promissory notes payable to the Plan over one to five years for general purpose loans and up to 30 years for principal residence loans.

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 ("GAAP").

Use of Estimates - The preparation of financial statements in conformity with GAAP requires the Company's management to make estimates and assumptions that affect the reported amounts of net assets available for benefits and changes therein. Actual results could differ from those estimates.

Risks and Uncertainties - The Plan utilizes various investment instruments including common stock, mutual funds, and a common/collective trust fund. Investment securities, in general, are exposed to various risks, such as interest rate risk, credit risk, 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 change could materially affect the amounts reported in the financial statements. There is a concentration of investments in Company common stock and there is a possibility that changes in the value of Company common stock could occur and affect the amounts reported in the statements of net assets available for benefits.

Investment Valuation and Income Recognition - The Plan's investments are stated at fair value. Fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Shares of mutual funds are valued at quoted market prices, which represent the net asset value of shares held by the Plan at year end. The Company's common stock fund is invested primarily in the common stock of the Company. A small portion of the fund may also be invested in short-term reserves such as money market investments to help accommodate daily transactions. The investment objective of this fund is to provide the possibility of long-term growth through increases in the value of the stock and the reinvestment of its dividends. The Company's common stock fund is stated at fair value at its year-end unit closing price (comprised of year end market price plus uninvested cash). The investment in the common/collective trust fund (which is considered to be a stable value fund) has underlying investments in investment contracts and is valued at the fair market value of the underlying investments and then adjusted by the issuer to contract value. Fair value of the stable value fund is the net asset value of its underlying investments and contract value is the principal plus accrued interest. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

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The Vanguard Retirement Savings Trust Fund (the “Trust”) is a common/collective trust fund that is considered to be a stable value fund and provides for the collective investment of assets of tax-exempt pension and profit sharing plans. The Trust invests solely in the Vanguard Retirement Savings Trust (“VRST”) Master Trust. The VRST Master Trust seeks to provide participants with an attractive rate of interest and safety of principal. The expectation is that each unit of the VRST Master Trust will maintain a constant net asset value of \$1. However, there is no assurance that this will be the case. The underlying investments of VRST Master Trust are primarily in a pool of investment contracts that are issued by insurance companies and commercial banks and in contracts that are backed by high-quality bonds, bond trusts, and bond mutual funds. Participants may ordinarily 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. The existence of certain conditions can limit the Trust’s ability to transact at contract value with issuers of its investment contracts. Specifically, any event outside the normal operation of the Trust that causes a withdrawal from an investment contract may result in a negative market value adjustment with respect to the withdrawal. Examples of such events include, but are not limited to, partial or complete legal termination of the Trust or a unit holder, tax disqualification of the Trust or unit holder, and certain Trust amendments if issuers’ consent is not obtained. In general, issuers may terminate the contract and settle at other than contract value if there is a change in the qualification status of the participant, employer, or Plan; a breach of material obligations under the contract and misrepresentation by the contract holder; or failure of the underlying portfolio to conform to the pre-established investment guidelines. Plan management believes that the occurrence of events that would cause the trust to transact at less than contract value is not probable.

In accordance with GAAP the statements of net assets available for benefits presents the stable value fund with underlying investments in investment contracts at fair value, as well as an additional line item showing an adjustment of fully benefit-responsive stable value fund from fair value to contract value. The statement of changes in net assets available for benefits is presented on a contract value basis.

Management fees and operating expenses charged to the Plan for investments 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.

Unit Values - Individual participant accounts invested in the Company common stock fund and the common/collective trust fund are maintained on a unit value basis. Participants do not have beneficial ownership in specific underlying securities or other assets in the various funds, but have an interest therein represented by units valued as of the last business day of the period. The various funds earn dividends and interest, which are automatically reinvested in additional units. Generally, contributions to and withdrawal payments from each fund are converted to units by dividing the amounts of such transactions by the unit values as last determined, and the participants’ accounts are charged or credited with the number of units properly attributable to each participant.

Company Common Stock Fund - Effective January 1, 2003, the portion of the Plan consisting of the Company stock fund is designated as a stock bonus plan within the meaning of Section 401(a) of the Internal Revenue Code (“IRC”) and an employee stock ownership plan within the meaning of Section 4975(e)(7) of the IRC. Such portion of the Plan is referred to as the “ESOP”. The ESOP was not implemented until September 18, 2003. The ESOP is designed to invest primarily in common stock of the Company or other qualifying employer securities as defined in Section 4975(e)(8) of the IRC. With respect to dividends paid on Company common stock allocated on the record date of the applicable dividend to a participant’s account under the ESOP, the participant shall have the right to elect that either the dividend be paid directly in cash or be paid to the

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participant's account under the ESOP and invested in Company common stock in the Company stock fund. Dividends paid from the ESOP to participants were \$185,506 in 2010 and \$176,636 in 2009.

Notes Receivable from Participants - Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent participant loans are recorded as distributions based on the terms of the Plan document.

Administrative Expenses - Effective October 29, 2010, the Company, as plan administrator, shall determine whether a particular plan expense is a settlor expense which the Company must pay, or is a non-settlor expense which may be paid by the Plan. The reasonable non-settlor expenses incident to the operation and administration of the Plan may be paid by the Plan. These expenses may include, but are not limited to, the compensation of personnel and advisors and the cost of compliance with the bonding requirements specified in ERISA. The Company shall determine whether it will pay any or all non-settlor reasonable Plan expenses or whether the Plan must bear the expense. The Company, at its discretion, may elect at any time, to pay part or all thereof directly but would have no continuing obligation to do so. Prior to October 29, 2010, all administrative expenses of the Plan were paid by the Company with the exception of loan administrative charges and investment advisory fees, which were paid by the participants. In 2010, the Plan participants paid for investment advisory fees and loan administrative charges which are reflected as administrative expenses in the accompanying statement of changes in net assets available for benefits.

New Accounting Standards –

ASU No. 2010-06, Fair Value Measurements and Disclosures: 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 are required in 2011. The adoption in 2010 did not materially affect, and the future adoption is not expected to materially affect, the Plan's financial statements.

ASU No. 2010-25, Reporting Loans to Participants by Defined Contribution Pension Plans: In September 2010, the FASB issued ASU No. 2010-25, Reporting Loans to Participants by Defined Contribution Pension Plans. The ASU requires that participant loans be classified as notes receivable rather than a plan investment and measured at unpaid principal balance plus accrued but unpaid interest rather than fair value. The Plan retrospectively adopted the new accounting in 2010. The adoption did not have a material effect on the Plan's financial statements.

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3. INVESTMENTS

The Plan's investments that represented 5 percent or more of the Plan's net assets available for benefits as of December 31, 2010 and 2009 are as follows:

	<u>2010</u>	<u>2009</u>
Vanguard Retirement Savings Trust Fund	\$61,085,445	\$54,485,684
Vanguard 500 Index Signal Fund	60,338,970	52,565,600
Vanguard PRIMECAP Fund	51,521,542	49,563,452
Vanguard Windsor Fund	51,824,960	49,024,236
Vanguard Total Bond Market Index Signal Fund	37,544,298	31,585,965
Vanguard Wellington Fund	34,681,881	31,356,477
Westar Energy Common Stock Fund	29,849,252	28,262,835
Vanguard Total International Stock Index Fund	31,671,171	28,209,762

During the year ended December 31, 2010, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value by \$35,470,136 as follows:

Mutual funds	\$31,234,998
Westar Energy Common Stock Fund	<u>4,235,138</u>
Net appreciation in fair value of investments	<u>\$35,470,136</u>

4. FAIR VALUE MEASUREMENTS

ASC 820, *Fair Value Measurements and Disclosures*, provides a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value, as follows: Level 1, which refers to securities valued using unadjusted 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 are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Plan's policy is to recognize significant transfers between levels at the end of the reporting period.

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The following tables set 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, 2010 and 2009.

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>2010 Total</u>
Mutual funds:				
Domestic stock funds	\$198,490,286	\$ —	\$ —	\$198,490,286
Balanced funds	49,888,133	—	—	49,888,133
International Stock fund	31,671,171	—	—	31,671,171
Fixed income fund	54,882,572	—	—	54,882,572
Total mutual funds	<u>334,932,162</u>	<u>—</u>	<u>—</u>	<u>334,932,162</u>
Westar Energy Common Stock Fund	—	29,849,252	—	29,849,252
Common/Collective trust	—	61,085,445	—	61,085,445
Total	<u>\$334,932,162</u>	<u>\$90,934,697</u>	<u>\$ —</u>	<u>\$425,866,859</u>

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>2009 Total</u>
Mutual funds:				
Domestic stock funds	\$177,437,473	\$ —	\$ —	\$177,437,473
Balanced funds	41,075,913	—	—	41,075,913
International Stock fund	28,209,762	—	—	28,209,762
Fixed income fund	46,010,863	—	—	46,010,863
Total mutual funds	<u>292,734,011</u>	<u>—</u>	<u>—</u>	<u>292,734,011</u>
Westar Energy Common Stock Fund	—	28,262,835	—	28,262,835
Common/Collective trust	—	54,485,684	—	54,485,684
Total	<u>\$292,734,011</u>	<u>\$82,748,519</u>	<u>\$ —</u>	<u>\$375,482,530</u>

For the year ended December 31, 2010, there were no significant transfers in or out of Levels 1, 2 or 3.

5. FEDERAL INCOME TAX STATUS

The Plan obtained its latest determination letter on July 9, 2004, in which the Internal Revenue Service stated the Plan, as then designed, was in compliance with the applicable requirements of the IRC. The Plan has been amended since receiving the determination letter. The Plan administrator believes the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC. Therefore, no provision for income taxes is included in these financial statements.

GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by taxing authorities. The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2010, there were 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 2007.

6. PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA.

7. EXEMPT PARTY-IN-INTEREST TRANSACTIONS

The Plan invests in shares of mutual funds and a common/collective trust fund managed by Vanguard. Vanguard Fiduciary Trust Company is the trustee of the Plan and, therefore, these transactions qualify as exempt party-in-interest transactions. Also, the Company common stock fund includes transactions that also qualify as party-in-interest transactions.

8. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the GAAP financial statements to amounts reflected in the Form 5500 as of December 31, 2010 and 2009.

	<u>2010</u>	<u>2009</u>
Net assets available for benefits per the financial statements	\$433,811,740	\$384,477,237
Adjustment from contract value to fair value for fully benefit- responsive stable value fund	2,405,429	1,177,881
Less deemed distributions	<u>(7,197)</u>	<u>(7,197)</u>
Net assets per the Form 5500	<u>\$436,209,972</u>	<u>\$385,647,921</u>

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The following is a reconciliation of the increase in net assets per the financial statements to amounts reflected in the Form 5500 for the year ended December 31, 2010.

	<u>2010</u>
Increase in net assets per the financial statements	\$49,334,503
Change in fair market value for fully benefit- responsive stable value fund	<u>1,227,548</u>
Increase in net assets per the Form 5500	<u>\$50,562,051</u>

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WESTAR ENERGY, INC. EMPLOYEES' 401(k) SAVINGS PLAN

FORM 5500, SCHEDULE H, PART IV, LINE 4(i) - SCHEDULE OF ASSETS (HELD AT END OF YEAR) DECEMBER 31, 2010

Identity of Issuer, Borrower, Lessor, or Similar Party	Description of Investment	Shares/Units	Cost	Current Value
* Vanguard 500 Index Signal Fund	Mutual Fund	630,633	**	\$60,338,970
* Vanguard Windsor Fund	Mutual Fund	3,836,044	**	51,824,960
* Vanguard PRIMECAP Fund	Mutual Fund	783,002	**	51,521,542
* Vanguard Total Bond Market Index Signal Fund	Mutual Fund	3,541,915	**	37,544,298
* Vanguard Wellington Fund	Mutual Fund	1,115,173	**	34,681,881
* Vanguard Total International Stock Index Fund	Mutual Fund	2,009,592	**	31,671,171
* Vanguard Mid-Cap Index Signal Fund	Mutual Fund	738,292	**	21,476,927
* Vanguard Prime Money Market Fund	Mutual Fund	17,338,275	**	17,338,275
* Vanguard Small-Cap Index Fund	Mutual Fund	383,536	**	13,327,887
* Vanguard Target Retirement 2015 Fund	Mutual Fund	430,403	**	5,345,611
* Vanguard Target Retirement 2020 Fund	Mutual Fund	133,454	**	2,949,331
* Vanguard Target Retirement 2025 Fund	Mutual Fund	170,524	**	2,152,012
* Vanguard Target Retirement 2010 Fund	Mutual Fund	56,730	**	1,265,638
* Vanguard Target Retirement Income Fund	Mutual Fund	78,212	**	882,234
* Vanguard Target Retirement 2035 Fund	Mutual Fund	51,963	**	680,193
* Vanguard Target Retirement 2030 Fund	Mutual Fund	21,527	**	466,711
* Vanguard Target Retirement 2040 Fund	Mutual Fund	20,473	**	440,162
* Vanguard Target Retirement 2005 Fund	Mutual Fund	30,246	**	354,789
* Vanguard Target Retirement 2045 Fund	Mutual Fund	23,939	**	323,182
* Vanguard Target Retirement 2050 Fund	Mutual Fund	15,059	**	322,270
* Vanguard Target Retirement 2055 Fund	Mutual Fund	1,059	**	24,118
Total Mutual Funds				<u>334,932,162</u>
* Vanguard Retirement Savings Trust Fund	Common/Collective Trust Fund	61,085,445	**	61,085,445
* Westar Energy Common Stock Fund	Company Stock Fund	2,206,153	**	29,849,252
* Various Participants	Participant Loans (maturing 2011-2041 at interest rates of 4.25% - 14.00%)		**	<u>9,981,052</u>
				<u>\$435,847,911</u>

* Represents a party-in-interest to the Plan.

** Cost information is not required for participant-directed investments and, therefore, is not included.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Investment and Benefits Committee for the Westar Energy, Inc. Employees' 401(k) Savings Plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

WESTAR ENERGY, INC.

By:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Tony Somma</u> Tony Somma	Chairman	<u>June 27, 2011</u>
<u>/s/ Greg A. Greenwood</u> Greg A. Greenwood	Member	<u>June 27, 2011</u>
<u>/s/ Mark Ruelle</u> Mark Ruelle	Member	<u>June 27, 2011</u>
<u>/s/ Bruce A. Akin</u> Bruce A. Akin	Member	<u>June 27, 2011</u>
<u>/s/ Kelly B. Harrison</u> Kelly B. Harrison	Member	<u>June 27, 2011</u>
<u>/s/ Jerl L. Banning</u> Jerl L. Banning	Member	<u>June 27, 2011</u>

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-151104 on Form S-8 of our report dated June 27, 2011, relating to the financial statements and financial statement schedule of the Westar Energy, Inc. Employees' 401(k) Savings Plan, appearing in this Annual Report on Form 11-K of the Westar Energy, Inc. Employees' 401(k) Savings Plan for the year ended December 31, 2010.

/s/ DELOITTE & TOUCHE LLP

Kansas City, Missouri
June 27, 2011