



2013 AEP Mid-Year Performance Update



energy economy environment

Sustainability at American Electric Power

AEP is committed to providing a mid-cycle update on our progress toward achieving our goals. This update focuses on our strategic goals as well as key issues and commitments of mutual interest to AEP and our stakeholders. A full update is published online every April. All data reported here are YTD through June 30, 2013, unless otherwise noted.

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Performance Summary

Results reflect the period Jan. 1, 2013 – June 30, 2013, unless otherwise noted

\$0.69

2013 Q2 earnings per share (GAAP)

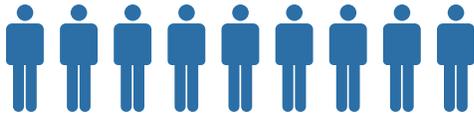
6,081
megawatts



coal-fired generating units AEP expects to retire by 2016

\$9 million

grants made from AEP and the AEP Foundation



\$408 million

total direct cost of additional environmental controls being installed at Flint Creek Power Plant in Arkansas

\$200 million

targeted savings or revenues through employee Engage to Gain Program

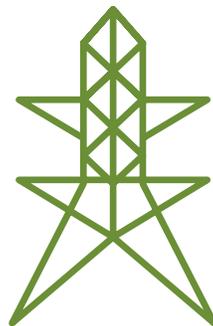


ENGAGE TO GAIN

0 environmental enforcement actions from regulatory agencies

240 miles

of transmission lines approved for the Pioneer project in Indiana



~72 BCF

AEP's natural gas consumption in first half of 2013



\$16 million estimated net savings

from reduced energy consumption in AEP facilities from 2007 baseline



Business Performance

KEY INDICATOR

PERFORMANCE

Financial Performance

- Second-quarter earnings \$0.69 per share GAAP and \$0.73 per share operating
- Earnings growth strategy on track with continued investment in the regulated businesses
- O&M cost controls on target
- Company reaffirms operating earnings guidance range for 2013 of \$3.05 to \$3.25 per share

Learn more about AEP’s financial performance on our [Investor Relations](#) page.



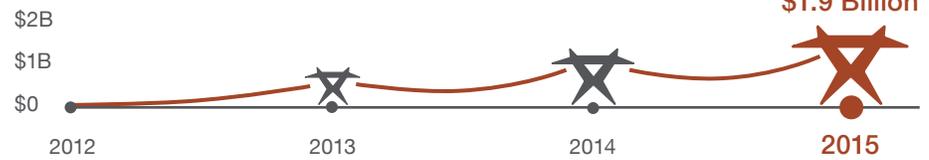
Grow our transmission business

- Appalachian Power Company (APCo) announced it will file requests this year with state regulators to make more than \$337 million in upgrades to the electric grid in West Virginia. These upgrades will meet an immediate need created by the upcoming coal-fired power plant retirements in the Kanawha and Ohio valleys as early as 2015, changing how electric power will flow on the transmission grid. The upgrades include rebuilding approximately 52 miles of existing transmission lines and upgrading substations. The AEP West Virginia Transmission Company (WVTCO), an affiliate of APCo, will oversee the work, which is expected to be completed in 2017.
- WVTCO has filed four Certificate of Convenience and Necessity (CPCN) applications with the Public Service Commission of West Virginia (WV PSC) for approval of projects that are required due to generation retirements and an application for a new customer connection. The estimated WVTCO capital spend associated with the improvements is approximately \$275 million (including \$118M of transfers from Ohio Power Company to WVTCO). Construction will begin once the applications are approved.
- The Missouri Public Utility Commission approved the stipulation that allows the transfer of transmission property to Transource and grants Transource Missouri a Certificate of Convenience and Necessity (CCN) to construct, own, operate and maintain assets in the state of Missouri.
- In June 2013, the Kentucky Public Service Commission (KPSC) issued an order stating that since Kentucky Transco’s (KTCO) rates are FERC-jurisdictional and KTCO would not have a tariff on file with the KPSC,

KTCO's activities in Kentucky are outside the jurisdiction of the KPSC. The practical effect of the order is that KTCO's construction, operation, and ownership of transmission lines in Kentucky is only subject to the regulatory authority of FERC and the siting authority of the Kentucky State Board on Electric Generation and Transmission Siting.

- Appalachian Transco (VA) has filed one CCN application for the Cloverdale project associated with the Regional Transmission Organization (RTO) reliability and economic requirements and asset renewal. The estimated capital spend associated with the improvements is approximately \$222 million with APCO's estimated capital spend of \$15M.
- Pioneer received utility status from the Indiana Utility Regulatory Commission in April 2013. The project is now in the engineering, procurement and construction phase.
- A new, more efficient, high-capacity 345-/138-kilovolt (kV) transmission line design will debut near Fort Wayne, Indiana. The new design was developed by AEP engineers for extra-high voltage lines. It has a lower physical profile, higher load capacity, less energy loss from conductor heating and other effects, and a lower cost per megawatt of power delivered. Construction is expected to begin in 2014 and be finished by mid-2016.
- The Public Utilities Commission of Texas (PUCT) unanimously approved an application by Electric Transmission Texas, LLC (ETT) for a CCN to build a 345-kV transmission line from the Laredo area into the Rio Grande Valley. The project includes construction of approximately 156 miles of 345-kV transmission lines and two new substations. The cost of the project is estimated at \$370 million. The Electric Reliability Council of Texas (ERCOT) determined in 2011 that the project is critical for the reliability of the ERCOT system and, specifically, the Lower Rio Grande Valley. Construction is expected to begin in 2014. ETT is a joint venture between subsidiaries of AEP and MidAmerican Energy Holdings Company.
- ETT and Sharyland Utilities filed a joint application with the PUCT to amend their CCN to build the Cross Valley Project, a proposed 345-kV transmission line in portions of Hidalgo and Cameron counties in the Lower Rio Grande Valley of Texas. Preliminary routing indicates the line could be 96 to 125 miles in length and, if approved by regulators, would be completed by summer 2016. ERCOT endorsed the project in 2012 as being critical for the reliability of the ERCOT system, and specifically, the Brownsville, TX area.

Transmission + Growth



AEP Trascos plan to construct nearly \$1.9 billion in additional transmission facilities through 2015.

Reliability Performance

SAIDI Update

SAIDI performance through June 2013 trended unfavorably in four of the seven AEP Operating Companies (OpCos) relative to the previous three-year average (2010 – 2012). This was due in large part to performance in June, which ranked as one of the highest SAIDI months in the past six years for several operating companies.

Long-term performance in AEP Ohio, Indiana Michigan Power (I&M), and Public Service Company of Oklahoma (PSO) generally compares favorably to regulatory targets and/or regional peers. Kentucky Power’s (KPCo) long-term trend is also favorable – 12 months ending June 2013, SAIDI placed below each of the previous five years’ performance. Though Southwestern Electric Power Company (SWEPCo) has shown some recent improvement (-4%), the unfavorable SAIDI trends in AEP Texas (15%) and APCo (8%), relative to the previous three-year average, point to potential risk. Additionally, SAIDI performance in APCo, KPCo, and SWEPCo continues to rank in the fourth quartile nationally.

SAIDI = System Average Interruption Duration Index

System Reliability

Vegetation management and equipment failure continue to be the primary causes of outages. More than 10 percent of APCo-WV, KPCo, and SWEPCo-LA customers experienced five or more sustained interruptions in the past year (excluding major storms).

Vegetation management programs, including regulatory recovery are being executed in several jurisdictions in an effort to reduce outage frequency (SAIFI) and ultimately reduce the average outage duration (SAIDI). PSO has established a cyclic maintenance program, AEP Ohio and KYPCo are progressing toward cyclic programs, APCo-VA has received approval from the Virginia State Corporation Commission to pilot 30 circuits on cycles to determine reliability benefits, and APCo-WV has filed with the WV PSC for funding to place the state’s distribution system on a cycle.

Failure to reverse current unfavorable trends in some OpCos could result in declining customer satisfaction levels and increased regulatory scrutiny. It poses the risk of mandated programs, required spending levels and places a hurdle in the path of getting cost recovery from state regulators. In an effort to minimize outages and improve reliability performance, each OpCo has developed and is executing a detailed Reliability Work Plan that focuses on high-risk aspects of their specific distribution system.

To address these issues, the AEP-wide storm preparedness team has launched a high level project plan with activities grouped into three pillars over three years. The three pillars are: **1)** Implement the Incident Command System (ICS) for Emergency Response; **2)** Deploy enabling technologies to allow accurate and timely information related to storm damage assessment and restoration activities; and **3)** Process improvements to make the restoration processes more efficient and effective.

Annual AEP Systemwide Reliability Indices

	2010	2011	2012
SAIFI ¹	1.315	1.477	1.317
SAIDI ²	185.4	227.9	193.0
CAIDI ³	141.0	154.3	146.6

¹ System Average Interruption Frequency Index is the average number of interruptions a customer experiences annually.

² System Average Interruption Duration Index represents the total minutes of interruption the average customer experiences annually.

³ Customer Average Interruption Duration Index is the average length of time it takes to restore service when an outage occurs.

Nuclear Reliability

Cook Nuclear Plant Unit 1 returned to service in May after a 53-day refueling outage and planned maintenance. The outage was longer than typical due to planned maintenance to the reactor vessel’s internal support structure along with installation of a new control room annunciator system and two unit auxiliary transformers. Prior to the start of the outage, Unit 1 ran for 518 consecutive days, beating the old record of 471 days set back in 1994.

Employee Safety & Health – zero harm, zero fatalities

Through June 30, 2013, there were no employee fatalities.

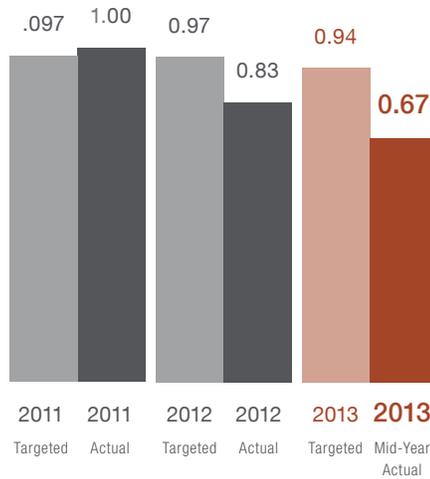
2013 Recordable Injury Rate
 Target = 0.94
 Actual = 0.67 (better than target)

2013 Severity Injury Rate
 Target = 18.64
 Actual = 19.36 (slightly above target)

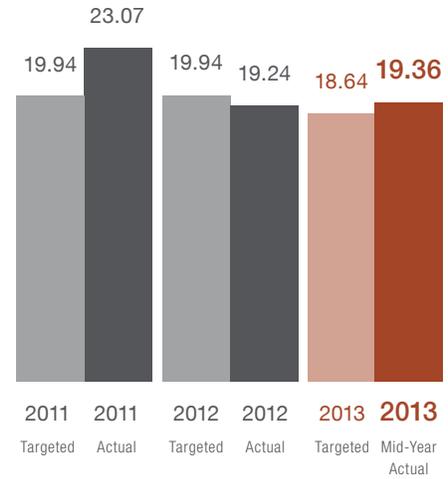
Compensation tied to performance. YTD June 30, 2013

AEP Employee Safety & Health Path to Excellence

Recordable Injury Rates



Injury Severity Rate



Recordable injury rate = lost workday cases + restricted activity cases + illnesses cases + medical cases x 200,000/hours worked. Excludes AEP River Operations. 2008 – 2011 performance includes hearing loss. From 2011 and on, goals exclude hearing loss, which is cumulative and cannot be attributed to a given year.

Average injury severity rate = lost work days + restricted activity days x 200,000/hours worked. Excludes AEP River Operations. Excludes hearing loss. Severity days represent lost productivity due to lost work days or restricted duty.

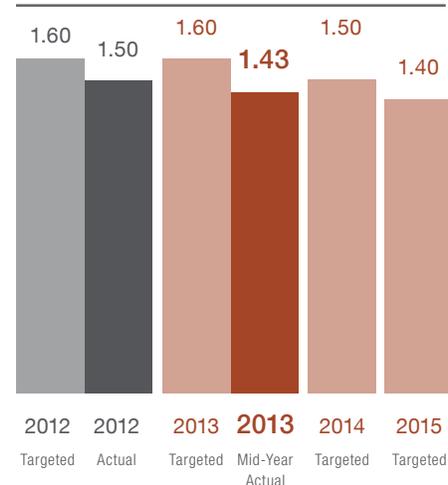
Contractor Safety – zero fatalities; achieve recordable injury rate of 1.60

Through June 30, 2013, there were no contractor fatalities.

2013 Contractor Recordable Injury Rate
 Target = 1.60
 Actual = 1.43 (better than target)

Contractors covered by this goal include all major O&M contractors, such as construction contractors. YTD June 30, 2013

AEP Targeted Contractor Recordable Rate Path to Excellence



Public Safety – Reduce public contacts and fatalities associated with people coming into contact with our electrical facilities; reduce copper theft incidents

Through June 30, 2013, there were three public fatalities (two from copper theft) and five injuries from electrical contact events (one from copper theft).

Plans for a public safety education advertising program and an in-school safety program continued to be suspended due to budget reductions. However, AEP continues to be active through its Safety Facebook page and customers received a safety focused email communication in May about National Safety Month. In addition, there is extensive safety information posted on all AEP websites.

Measuring the Serious Injuries & Fatalities rate (SIF)

On June 1, AEP began measuring the SIF rate to focus more directly on the types of events that can cause life-altering injuries and fatalities. The purpose of measuring SIF is to provide another mechanism to recognize these serious events and determine appropriate actions to prevent them from occurring in the future.

Environmental Performance

KEY INDICATOR

Transition the generating fleet

PERFORMANCE

- AEP announced on July 11, 2013 that it will likely retire its 600-megawatt (MW) coal-fueled Muskingum River Plant Unit 5 in Beverly, Ohio, in 2015. The company had already announced plans to retire Muskingum River

Planned AEP Generating Unit Retirements (in MWs)

Company	Plant Name & Unit	State	Generating Capacity
Appalachian Power	Clinch River Plant Unit 3	Virginia	235
Appalachian Power	Glen Lyn Plant	Virginia	335
Appalachian Power	Kanawha River Plant	West Virginia	400
Appalachian Power/Ohio Power	Philip Sporn Plant Units 1–4	West Virginia	600
Indiana Michigan Power	Tanners Creek Plant Units 1–3	Indiana	495
Kentucky Power	Big Sandy Plant Unit 2	Kentucky	800
Ohio Power	Beckjord Generating Station	Ohio	53
Ohio Power	Kammer Plant	West Virginia	630
Ohio Power	Muskingum River Plant Units 1–5	Ohio	1,440
Ohio Power	Picway Plant	Ohio	100
Public Service Company of Oklahoma	Northeastern Station Unit 4	Oklahoma	465
Southwestern Electric Power Company	Welsh Plant Unit 2	Texas	528
Total			6,081

Plant units 1 through 4 by mid-2015 and was planning to refuel Unit 5 to natural gas and reduce its capacity. The five-unit plant provides a total net generating capacity of 1,440 MW of power. Although Unit 5 is equipped with environmental controls, a combination of factors made the refueling plan uneconomic. About 100 employees will be displaced by the plant retirement. AEP will work to provide displaced employees with opportunities to apply for available positions elsewhere in the company. Overall, AEP expects to retire approximately 6,081 MW of coal-fired units by 2016.

- APCo has requested approval from Virginia and West Virginia regulators to convert a portion of the Clinch River Plant in Russell County, Va., to operate with natural gas. Converting two of the three generating units from coal-fired to natural gas is the least-cost alternative to meeting customers' power needs while complying with new environmental regulations. APCo is seeking to convert two of the Clinch River units to natural gas and to retire a third unit. The conversion is expected to cost about \$65 million. If approved, a residential customer using 1,000 kWh per month would pay less than 50 cents per month once the units are operational. The conversion is part of an overall plan to meet APCo's customers' needs as four existing power plants in Virginia and West Virginia are set to close by mid-2015. The natural gas units are expected to be operational in 2016.
- SWEPCo received approval from the Arkansas Public Service Commission in July to install additional environmental controls at the Flint Creek Power Plant in Gentry, Ark. SWEPCo and the Arkansas Electric Cooperative each own 50 percent of the 528-MW coal-fueled plant. As a baseload unit, Flint Creek provides power 24 hours a day and is the only baseload plant located in Northwest Arkansas. The added controls are required to comply with new Environmental Protection Agency regulations. The estimated direct cost of the project is \$408 million; SWEPCo's share of the cost is \$204 million. The estimated cost impact for SWEPCo's Arkansas customers, starting in 2017, would be an increase of approximately \$2.97 per month, or 3.85 percent for a residential customer using 1,000 kWh per month. Commercial customers would pay about 3.87 percent more. The plant currently employs 69 people.
- KPCo filed a settlement agreement with the Kentucky Public Service Commission which would, if approved, authorize the transfer of 50 percent of the ownership of two power generating units from AEP Ohio's Mitchell Power Plant near Moundsville, W.Va., to KPCo, effective Dec. 31, 2013. If approved, KPCo would be allowed to collect \$44 million annually to recover a portion of the investment in the Mitchell assets, starting in mid-2015. The plant transfer is needed to help replace the generation of

KPCo's Big Sandy Plant's 800-MW Unit 2 which will be retired from service in 2015 to comply with environmental regulations. Under the agreement, the company would also provide economic development support to the county where Big Sandy Plant is located.

Compliance – zero enforcement actions from regulatory agencies

AEP received zero environmental enforcement actions during the first half of 2013.

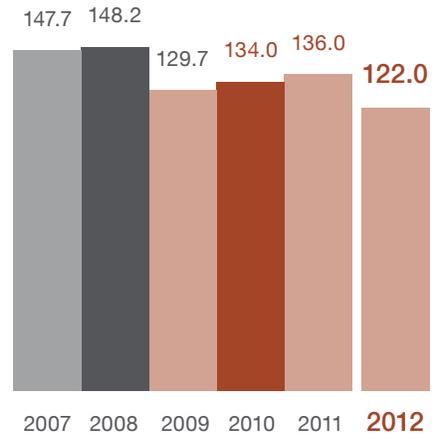
Emissions – comply with SO₂ and NO_x caps, per NSR consent decree

AEP is on pace to comply with the annual SO₂ and NO_x caps established by the NSR Settlement Agreement.

Reduce CO₂ emissions from power plants by additional 10% by the end of 2020 compared with 2010 levels of approximately 134 million metric tons. This will result in total reduction of about 25% from 2003 levels

AEP remains committed to reducing CO₂ emissions by 2020. The 2013 emissions data will be reported in 2014 when emission data is reported annually. Emissions in 2012 (122 million metric tons) were lower than 2011 emissions, and are projected to continue to drop with completion of the AEP fleet transition plan and associated retirement of coal-fired generation.

Total AEP System – Annual CO₂ Emissions (in million metric tons)



Reduce internal energy consumption by 15% by 2015 in AEP facilities (excluding power plants); build/renovate to LEED standards where appropriate

Year-to-date ending June 30, 2013, we have achieved an estimated energy reduction of 23.27% over the baseline year 2007. This compares to a 2012 year-end energy reduction total of 23.82%. The net savings from reduced energy consumption in AEP's facilities from the investments already made between 2008 and June 2013 and employee education have been approximately \$16,078,457. The kWh savings from 2008, when we began tracking usage, through June 30, 2013 is a weather-normalized savings of 178,649,521 kWh.

We continued our efforts in 2013 by installing efficient equipment, lighting and controls in our facilities. Currently, there are three new service centers

that have been approved and are being designed to obtain LEED Certification – Silver New Construction. AEP currently has five LEED facilities across the AEP System which have been certified over the past several years.

Water Stewardship – Identify opportunities to address water use and conservation; report on how AEP is managing its water risks and resources

- The AEP Mitchell Plant was selected as a representative plant for the evaluation of water usage, with the goal of maximizing water reuse and minimizing the quantity of wastewater generated that would require treatment prior to discharge. A dynamic water balance computer model was developed and reviewed by AEP’s engineering, projects, and environmental departments. One of the main drivers for this study was the likelihood that changes in power plant water balances would be required due to future regulatory requirements for handling coal ash and to address water conservation issues. The deliverables of this study provide data that can be used not only for the Mitchell Plant, but for the rest of the AEP fleet as well. For example, this same model is being applied to the OVEC Kyger Creek Plant to achieve similar wastewater reductions and water treatment cost savings.
- AEP is working with the Electric Power Research Institute (EPRI) and other partners on a water quality trading project in the Ohio River Basin. It is a market-based approach to improve water quality in the river by reducing discharges of nutrients, such as phosphorous and nitrogen, by paying farmers to install best management practices, such as fencing to keep livestock out of rivers and streams. Participation in this voluntary program is in lieu of installing costly wastewater treatment equipment at various power plants and other municipal and industrial sites. In August 2012, representatives from Ohio, Indiana and Kentucky signed the world’s largest interstate water quality trading plan. This agreement marks the first time states have approved an [interstate water quality trading program](#). AEP is one of the first utilities in the country to participate in this innovative program and is planning to participate in a pilot “trade” in late 2013 or early 2014.
- AEP is also participating with EPRI in a study of water use within the Big Cypress Basin of Texas, in which AEP operates several power plants. Many technologies and strategies can be implemented to reduce fresh water use (especially under critical flow conditions) and accommodate future demands while meeting ecological requirements. In response to this need, the “Water Prism” model was developed by EPRI to help understand the status of water risk within a watershed under current and projected future conditions. The Water Prism Model evaluates the potential benefits of implementing water-saving strategies in order to reduce water risk. Examples of water-saving strategies include: **1)** use of degraded water sources, in-plant reuse, and dry or hybrid cooling for the electric

power sector; **2)** agricultural reuse, retirement of agricultural land, low water crops, and water efficient irrigation for the agricultural sector; **3)** desalination, water recycling, improved water use efficiency, and increased distribution system maintenance for the municipal sector; and **4)** degraded water use and in-plant reuse for the industrial sector. The model has been successfully applied to the Muskingum River Basin (OH) with support from AEP and is now being applied to the Big Cypress Basin (TX).

Social Performance

KEY INDICATOR

Improve health of corporate culture

PERFORMANCE

- In early 2013, AEP announced an Engage to Gain Program which is a one-year gain-sharing program. Employees have the opportunity to share in cost savings associated with ideas that result in 2013 operations and maintenance (O&M) savings that are sustainable in future years.
- Beginning May 1, 2013, AEP enhanced its benefits support for employees who serve in the military by revising existing policy to make up the difference between military pay and their AEP base wage – up to 10 calendar days per year.
- AEP River Operations in Chesterfield, Mo., was selected as one of The *St. Louis Post-Dispatch* Top Workplaces. The Top Workplaces are determined based solely on employee feedback.

Corporate giving & community outreach

- Through June 2013, AEP, its operating units and the American Electric Power Foundation made grants totaling more than \$9 million to non-profit organizations to support education, basic needs, social services, the environment and the arts.
- Through the Matching Gifts program, \$202,184 was awarded to colleges and universities in the first half of 2013.
- AEP continues to offer mini-grants for Make a Difference Day projects led by or involving AEP active and retired employees who serve as coordinators or volunteers to address needs in local communities.
- AEP and AEP Ohio collaborated with the IBEW Local 1466 for the 2013 United Way campaign. AEP and IBEW Local 1466 raised a record 405,000 meals to supply food banks in Ohio through AEP’s annual Operation Feed campaign in 2013.

- Several union locals around the AEP System similarly participate with the company in local campaigns, such as the partnership that IBEW Local 329 and SWEPCo have developed. Local 329 has steadily increased its giving since 2004 by 72%.