
American Electric Power

Development of 2014 Funding Rates for Active Employees

Self-Insured Medical and Dental Plans

March 2015, based on analysis performed in 2013

http://natct.internal.towerswatson.com/clients/604598/Financial/Documents/2014_Funding_rates.doc

Overview

This report presents 2014 rates for American Electric Power's (AEP) self-insured medical and dental plans for active employees. The development of the recommended 2014 funding rates for the medical and dental plans is shown on Exhibits 3 and 4, with the recommended rates shown in boxes at the bottom of those exhibits.

Data Sources, Methodology and Assumptions

All vendors servicing AEP patients in 2012 were contacted and all provided the requested information. Claims data were obtained from the following vendors in an electronic format: Aetna, Lumenos, Magellan and Express Scripts. Enrollment data for medical plans were obtained from AEP. Dental enrollment data were obtained from Aetna.

For the medical and dental plans, we analyzed 2012 enrollment and claims incurred in 2012 and paid through March 2013; we then projected the claim rates to 2014, adjusting for trend and estimating the effect of changes in plan provisions and benefit schedules. Projected administration expense fees to be charged by claims administrators were included in the development of 2014 rates.

We have adjusted prescription drug claims experience for rebates expected to be received from Express Scripts under the terms of the Towers Watson Rx Collaborative.

To arrive at the final 2014 monthly rates for each medical plan option, we adjust these rates for:

- Health risk adjustments
- Differences in plan design and geography

These adjustments to the claim rates are illustrated in Exhibit 2 and are described in more detail below and on the following pages.

Health Risk Adjustments

2012 claims for all medical plans were adjusted to a common plan design and pooled together. For the Lumenos CDHP, we included with claims experience, 50% of employees' unused HRA dollars that were rolled over for future use. We calculated a common claim rate across the entire pool and trended to 2014 using the trend rate assumptions shown on Exhibit 2.

Claim rates were determined for each individual plan (Aetna Open Choice/Open Access, Aetna HDHP and Lumenos CDHP) by neutralizing the portion of the rate differences arising from demographic, health status and geographic risk factors underlying the Aetna and Lumenos experience. These demographic and geographic risk factors were calculated using 2012 census data, while the health status scores were tabulated by Thomson Reuters.

The resulting risk-adjusted rates were closer together, and the remaining differences in rates between the options can be attributed to differences in:

- Benefit provisions
- Network efficiency
- Miscellaneous factors such as judicious use of services covered by the medical plan

The risk-adjusted rates enable AEP to set employee contribution rates for Aetna and Lumenos plan options using plan cost rates that approximate what AEP would set if all employees enrolled in that option. Exhibit 2 illustrates the development of these factors.

Plan Design Changes

Effective January 1, 2014, AEP implemented the following program and plan design change to the medical and prescription drug benefit medical plan offerings for active employees and retirees:

- Changes in the Rx Formulary List
- Included Teladoc program

AEP's self-insured medical plan offerings to active employees and pre-65 retirees will feature the following key plan provisions in 2014:

	Aetna PPO	Lumenos HRA	Aetna HDHP
Medical (Single/Family)			
Annual Deductible	\$250/\$750	\$1,500/\$2,250/\$3,000*	\$2,500/\$7,500
HRA Allocation/HSA Seed	N/A	\$1,000/\$1,500/\$2,000	None
Deductible Gap	N/A	\$500/\$750/\$1,000*	N/A
Coinsurance	85%	85%	100%
Out-of-Pocket Maximum**	\$2,500/\$5,000	\$4,000/\$6,000/\$8,000*	\$2,500/\$7,500
Office Visit Copays			
Teladoc	\$20	Deductible/Coins.	Deductible/Coins
Primary Care Provider	\$20	Deductible/Coins.	Deductible/Coins.
Specialist	\$35	Deductible/Coins.	Deductible/Coins.
Urgent Care	\$50	Deductible/Coins.	Deductible/Coins.
ER Copays	\$100	Deductible/Coins.	Deductible/Coins.
Prescription Drugs			
Annual Deductible	\$50/\$100 - Retail	Combined with Medical	Combined with Medical
Retail			
Generic	\$5	Deductible/Coins.	Deductible/Coins.
Brand Preferred (min/max)	80% (\$20/\$100)	Deductible/Coins.	Deductible/Coins.
Brand Non-preferred (min/max)	65% (\$35/\$200)	Deductible/Coins.	Deductible/Coins.
Mail Order			
Generic	\$12	Deductible/Coins.	Deductible/Coins.
Brand Preferred (min/max)	80% (\$50/\$200)	Deductible/Coins.	Deductible/Coins.
Brand Non-preferred (min/max)	65% (\$90/\$300)	Deductible/Coins.	Deductible/Coins.
Out-of-Pocket Maximum	\$1,000/\$3,000	Combined with Medical	Combined with Medical

*Individual deductibles and out-of-pocket maximums don't exist for family tiers.

**Includes HRA allocation.

Active Employee VEBA Contribution Rates

The 2014 funding rates for the active employees' medical VEBA shown (boxed) at the bottom of Exhibits 3 and 4 are greater than those used to set employee contributions and COBRA rates due to incorporation of the following items that are not included in COBRA and employee contribution rates:

- The wellness program costs are not included in the COBRA and employee contribution rate bases. However, AEP pays these program costs from VEBA funds, so the VEBA funding rates include the estimated \$1.5 million (\$7.01 PEPM) of annual charges projected for this program in 2014.
- The VEBA funding rates include *actual* 2014 administrative fees that are expected to be incurred in 2014, not the *estimated* rates used to develop COBRA and employee contribution rates.

Pricing Assumptions

Health care trend rates:

- Non-prescription drug medical benefits
 - Actives and pre-65 retirees 7%
 - Post-65 retirees 6%
- Prescription drugs
 - Actives and pre-65 retirees 7%
 - Post-65 retirees 7%
- Dental benefits 4%

Tier slopes (determined using aggregate data across all medical plans)

Exhibit 1 presents the development of the medical plan slopes used for active employees.

	Medical Plans			Dental Plan
	Actives	Pre-65	Post-65	
• Single	1.00	1.00	1.00	1.00
• Employee + spouse	2.26	2.00	2.00	1.98
• Employee + child(ren)	1.85	1.54	2.14	3.04
• Full family	3.12	2.54	3.14	4.02

Limitations

This report is provided subject to the terms set out herein and in our master consulting services agreement dated July 29, 2004, and any accompanying or referenced terms and conditions. This pricing has been conducted for the purposes described above and may not be suitable for any other purpose. In particular, please note that no funded status measure is included in this report.

Nature of actuarial calculations

Attachment 1
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The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. Reasonable efforts were made in preparing this report to confirm that items that are significant in the context of the actuarial costs are treated appropriately, and are not excluded or included inappropriately. Any rounding (or lack thereof) used for displaying numbers in this report is not intended to imply a degree of precision, which is not a characteristic of actuarial calculations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the length of experience period), and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements.

Actuarial Certification

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, assets and methods provided by AEP and other persons or organizations designated by AEP. We have relied on all the data and information provided as being complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by AEP, may produce materially different results that could require that a revised report be issued.

The results shown in this letter have been developed based on actuarial assumptions that, to the extent evaluated by Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standard for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to other postretirement benefit plans. Our objectivity is not impaired by any relationship between AEP and our employer, Towers Watson Delaware Inc.



Martin P. Franzinger, ASA, MAAA



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**American Electric Power
 Development of Tier Slopes
 Active Employees Only**

	Aetna Open Choice & Open Access PPOs	Aetna High Deductible Health Plan	Lumenos Consumer-Driven Health Plan	Total
1. Claims incurred in 2012				
a. Medical				
i. Employee	\$48,106,187	\$3,570,541	\$18,187,078	
ii. Spouse	39,860,818	3,066,449	16,233,694	
iii. Child(ren)	<u>20,519,808</u>	<u>1,318,970</u>	<u>11,062,852</u>	
iv. Total	\$108,486,812	\$7,955,960	\$45,483,624	
b. Prescription drugs				
i. Employee	\$15,189,793	\$1,091,311	\$4,919,892	
ii. Spouse	11,901,553	817,582	3,828,253	
iii. Child(ren)	<u>4,570,351</u>	<u>213,818</u>	<u>1,900,937</u>	
iv. Total	\$31,661,697	\$2,122,711	\$10,649,082	
c. Less estimated Rx rebates				
i. Employee	(\$1,666,086)	(\$119,700)	(\$539,636)	
ii. Spouse	(1,305,417)	(89,676)	(419,900)	
iii. Child(ren)	<u>(501,297)</u>	<u>(23,453)</u>	<u>(208,504)</u>	
iv. Total	(\$3,472,800)	(\$232,829)	(\$1,168,040)	
d. MH/SA				
i. Employee	\$400,492	\$27,667	\$190,208	
ii. Spouse	373,318	34,209	221,313	
iii. Child(ren)	<u>768,937</u>	<u>53,203</u>	<u>463,671</u>	
iv. Total	\$1,542,747	\$115,079	\$875,192	
e. Total (a)+(b)+(c)+(d)				
i. Employee	\$62,030,386	\$4,569,819	\$22,757,541	
ii. Spouse	50,830,271	3,828,564	19,863,360	
iii. Child(ren)	<u>25,357,799</u>	<u>1,562,539</u>	<u>13,218,958</u>	
iv. Total	\$138,218,456	\$9,960,921	\$55,839,859	
2. Adjust to common "average" plan design	0.988	0.824	1.057	
3. Adjusted 2012 incurred claims (1e) / (2)				
i. Employee	\$62,760,904	\$5,545,278	\$21,539,929	\$89,846,112
ii. Spouse	51,428,888	4,645,797	18,800,597	74,875,282
iii. Child(ren)	<u>25,656,432</u>	<u>1,896,073</u>	<u>12,511,695</u>	<u>40,064,200</u>
iv. Total	\$139,846,225	\$12,087,148	\$52,852,221	\$204,785,594
4. Average 2012 enrollment				
a. Single	2,051.7	552.1	1,626.7	4,230.4
b. Employee + spouse	2,803.9	302.3	1,179.8	4,285.9
c. Employee + child(ren)	1,051.2	102.8	679.5	1,833.5
d. Full family	<u>4,447.8</u>	<u>464.8</u>	<u>2,567.6</u>	<u>7,480.3</u>
e. Total employees (a)+(b)+(c)+(d)	10,354.6	1,422.0	6,053.5	17,830.1
5. 2012 Monthly claims rates				
a. Employee (3i) / (4e)				\$419.92
b. Spouse (3ii) / [(4b)+(4d)]				530.30
c. Child(ren) (3iii) / [(4c)+(4d)]				358.47
6. Tier slope - active employees				
a. Single (5a) / (5a)				1.000
b. Employee + spouse [(5a)+(5b)] / (5a)				2.263
c. Employee + child(ren) [(5a)+(5c)] / (5a)				1.854
d. Full family (6b) + (6c) - (6a)				3.117

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**American Electric Power
 Development of Efficiency Factors
 Active Employees Only**

	Aetna Medical Plans			Lumenos Consumer-Driven Health Plan	Average Population Average Plan Design Pooling	
	Aetna Open Choice & Open Access PPOs	Aetna High Deductible Health Plan	All Aetna			
1. Claims incurred in 2012						
a. Medical	\$108,486,812	\$7,955,960		\$39,444,579		
b. Prescription drugs	31,661,697	2,122,711		7,802,631		
c. Projected prescription drug rebates	(3,472,800)	(232,829)		(1,168,040)		
d. MH/SA	1,542,747	115,079		875,192		
e. 2012 HRA claims paid	0	0		8,885,496		
f. Est. PV of Rolled over HRA \$ to be used	0	0		<u>332,606</u>		
g. Total	\$138,218,456	\$9,960,921		\$56,172,465		
2. Adjust to common plan design within network	1.000	0.834		n/a		
3. Adjusted 2012 incurred claims	\$138,218,456	\$11,946,457	\$150,164,913	\$56,172,465	\$206,337,378	
4. Average 2012 enrollment						
a. Single	1.00	2,051.7	552.1	2,603.8	1,626.7	4,230.4
b. Employee + spouse	2.26	2,803.9	302.3	3,106.2	1,179.8	4,285.9
c. Employee + child(ren)	1.85	1,051.2	102.8	1,154.0	679.5	1,833.5
d. Full family	3.12	<u>4,447.8</u>	<u>464.8</u>	<u>4,912.7</u>	<u>2,567.6</u>	<u>7,480.3</u>
e. Total employees		10,354.6	1,422.0	11,776.6	6,053.5	17,830.1
f. Total adult equivalents		24,206.9	2,875.3	27,082.2	13,557.8	40,640.0
5. 2012 Monthly single claim rates	\$475.82	\$346.24	\$462.07	\$345.27	\$423.10	
6. Plan differences						
a. Demographics			1.027	0.947	1.000	
b. Non-demographic health status			1.064	0.872	1.000	
c. Geography			1.001	0.997	1.000	
d. Plan design			0.972	1.056	1.000	
e. Aggregate (a)x(b)x(c)x(d)			1.063	0.869		
7. Risk-adjusted single monthly claim rates (5) / (6e)			\$434.55	\$397.21	\$423.10	
8. Claims efficiency factors			1.027	0.939	1.000	

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**American Electric Power
 Development of 2014 Funding Rates
 Active Employees Only**

	Self-Insured Plans - Active Employee Pool			
	Aetna Open Choice & Open Access PPOs	Aetna High Deductible Health Plan	Lumenos Consumer-Driven Health Plan	Total Normalized to Lumenos Plan Design
1. Claims incurred in 2012				
a. Medical	\$108,486,812	\$7,955,960	\$39,444,579	
b. Prescription drugs	31,661,697	2,122,711	7,802,631	
c. Projected prescription drug rebates	(3,472,800)	(232,829)	(1,168,040)	
d. MH/SA	1,542,747	115,079	875,192	
e. 2012 HRA claims paid	0	0	8,885,496	
f. Rolled over HRA dollars expected to be used	0	0	332,606	
g. Total	\$138,218,456	\$9,960,921	\$56,172,465	
2. Plan value relative to Lumenos option	0.935	0.780	1.000	
3. 2012 Incurred claims adjusted to Lumenos design (1g) / (2)	\$147,751,472	\$12,770,412	\$56,172,465	\$216,694,349
4. Average 2012 enrollment				
a. Single	1.00	2,051.7	552.1	1,626.7
b. Employee + spouse	2.26	2,803.9	302.3	1,179.8
c. Employee + child(ren)	1.85	1,051.2	102.8	679.5
d. Full family	3.12	4,447.8	464.8	2,567.6
e. Total employees		10,354.6	1,422.0	6,053.5
f. Total adult equivalents		24,206.9	2,875.3	13,557.8
5. 2012 Monthly single claim rates (3) / (4f) / 12	\$508.64	\$370.12	\$345.27	\$444.34
6. Trend to 2014				
a. Trend rate (medical+rx combined)				7.00%
b. Number of months				24
c. Trend factor				1.145
7. 2014 Single monthly claim rate (5) x (6c)				\$508.72
8. Adjustments to pooled rate				
a. Plan design	0.935	0.780	1.000	1.000
b. Efficiency	1.027	1.027	0.939	1.000
c. Aggregate (a) x (b)	0.961	0.801	0.939	1.000
9. 2014 Monthly single claim rates (7) x (8c)				
a. 2012 designs (7) x (8c)	\$488.78	\$407.54	\$477.59	\$508.72
b. Increase HDHP deductible to \$2,500/\$7,500 (1/1/2013)	1.000	0.990	1.000	0.999
c. Rx Formulary Change 1/1/2014	0.993	0.993	0.993	0.993
d. Auto Improvement RxC savings (effective 1/1/2013)	0.996	0.996	0.996	0.996
e. Women's Preventative Health Services (eff. 1/1/2013)	1.002	1.002	1.002	1.002
f. PPO Copay changes (eff. 1/1/2013)	0.979	1.000	1.000	0.985
g. Exclude Walgreens from Retail Network (eff. 1/1/2013)	0.999	0.999	0.999	0.999
h. Aetna PPO and HSA MSO Radiology Program (eff. 1/1/2013)	0.998	0.998	1.000	0.999
i. Anthem AIM Radiology Program (eff. 1/1/2013)	1.000	1.000	0.994	0.999
j. Provided generic birth control at zero copay (eff. 1/1/2013)	1.001	1.001	1.001	1.001
k. Funding deficiency recovery costs	\$0.00	\$0.00	\$0.00	\$0.00
l. Wellness program costs (\$1.5 million)	\$3.08	\$3.08	\$3.08	\$3.08
m. 2013 designs product[(a) - (j)] + (k) + (l)	\$476.63	\$402.40	\$473.81	\$498.19
10. 2014 administration fees				
a. Medical (PEPM)	27.29	27.29	46.72	
b. MH/SA (PEPM)	2.20	n/a	2.20	
c. Prescription drugs (PEPM)	2.92	2.92	2.92	
d. Aetna PPO and HSA MSO Fee	1.14	1.14	0.00	
e. Anthem AIM Fee	0.00	0.00	1.33	
f. Teladoc (PEPM)	0.74	0.74	0.74	
g. TRF (PEPM)	13.73	13.73	13.73	
h. Total (PEPM)	48.03	45.83	67.64	
i. Total (per adult equivalent per month)	20.54	22.66	30.20	
11. 2014 monthly full funding rates				
a. Single (9m) + (10i)	1.00	\$497.18	\$425.06	\$504.01
b. Employee + spouse	2.26	1,125.04	961.85	1,140.51
c. Employee + child(ren)	1.85	921.60	787.92	934.27
d. Full family	3.12	1,549.47	1,324.71	1,570.77
e. One-tier weighted-average of rates (based on enrollment (12))		\$1,142.61	\$844.35	\$1,111.82
12. Current enrollment as of March 2013				
a. Single		2,022	658	1,566
b. Employee + spouse		2,513	312	1,093
c. Employee + child(ren)		1,220	153	774
d. Full family		3,979	516	2,305
e. Total employees		9,734	1,639	5,738

**American Electric Power
 Development of Final 2014 Dental Rates
 Active and Retired Employees**

1. Claims incurred calendar year 2012		\$17,538,121
	tier	
2. Average enrollment in 2012	factor	
a. Single	1.00	7,765
b. Employee + Spouse	1.98	10,652
c. Employee + Child(ren)	3.04	1,711
d. Full Family	4.02	7,479
e. Total	2.32	27,607
f. Count of Employee Equivalents (sum of product of counts and tier factors)		64,040
3. 2012 monthly claim rates		\$22.82
(1) / (2f) / 12		
4. Trend to 2014		
a. Annual rates		4.0%
b. Months of trend		24.0
c. Trend factor $(1+(4a))^{(4b)/12}$		1.082
5. 2014 monthly claims rates (3) x (4c)		\$24.68
6. Network change factors (eff. 1/1/2010)		1.000
7. 2014 adjusted monthly claims rates		\$24.68
(5) x (6)		
8. Administration fees (est. 2014)		
a. Per employee per month		\$2.32
b. Per employee or dependent unit		\$1.01
9. 2014 monthly full funding rates		
a. Per ee or dep unit (7)+(8b)		\$25.69
Tiers		
b. Single	1.00	\$25.69
c. Employee + Spouse	1.98	50.75
d. Employee + Child(ren)	3.04	78.10
e. Full Family	4.02	103.16
f. Composite - one-tier weighted-average of rates		\$69.65
(based on active enrollment (10) only)		
10. Current enrollment - active employees only		
a. Single		3,761
b. Employee + Spouse		4,462
c. Employee + Child(ren)		1,661
d. Full Family		7,031
e. Total		16,915

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