



Transmission Formula Rate

AEP East Operating Companies

Annual Update March 24, 2017



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Section 205 FERC Filing

- AEP filed Section 205 November 22, 2016, modifying Attachment H-14A and H-14B of the PJM OATT
- FERC issued an Order March 10, 2017, accepting (subject to refund) those modifications
- AEP calculated its **Projected Transmission Revenue Requirement (PTRR)** for rates effective January 1, 2017



Section 205 FERC Filing (continued)

- **Previously, AEP's formula rates were billed on projected plant and actual FERC Form 1 expenses, paid July 1-Dec 31, 2016.**
- **True-up was based on average historic plant investment and actual FERC Form 1 balances.**
- **Cost recovery for any given rate year would not be completed for as long as 30 months.**

Section 205 FERC Filing (continued)

- **Transition to fully projected (“PTRR”) formula rate**
- **Pro-rate property-related accumulated deferred income taxes (“ADIT”) per IRS rules**
- **Provide deferred tax liability and flow-through**
- **Minor modifications to protocols**
- **Provide billing credit for existing customers that own network transmission facilities, PJM OATT Section 30.9**



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Billing Transition

- **The 2017 PTRR updated rates**
 - included in March bill (billed in April)
- **For January and February, PJM will make prior period adjustments to the bills.**
 - **NITS – spread the Jan/Feb under-collection over 8 months, beginning with March billing**
 - **Schedule 12 – reflect the Jan/Feb over-collection in March and April bills**
 - **Schedule 1A – bill the entire under-collection in March**



Federal Energy Regulatory Commission (FERC)

- **FERC has accepted other forward-looking formula rates**
- **Not a departure from ratemaking practice**
- **Customers pay only transmission costs (no more or less) – mitigates lag**



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Benefits to Customers

- **Matches rates to service**
- **Reduces true-up**
- **Reduces interest**
- **PTRR consistent with PJM billing process, new NSPL beginning January 1**
- **True-up ensures customers pay actual revenue requirement based on FERC Form 1 reports, no more and no less**



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Future True-ups

- **2016 true-up of the previous formula rate will be computed, filed, and posted on the PJM/AEP website by May 25, 2017 (as done in the past)**
 - **Any over/under recovery with interest will be included in the PTRR effective January 1, 2018, and posted on the PJM/AEP website by October 31, 2017**
- **2017 PTRR will be trued-up by May 25, 2018**
 - **Any over/under recovery with interest will be included in rates effective January 1, 2019**



AEP East Zone Network Service Peak Load

- **NSPL (1 CP)**
 - **2015 NSPL February 20, 2015 (winter peak)**
 - **Hour 08 24,725.1 MW**

 - **2016 NSPL August 11, 2016 (summer peak)**
 - **Hour 15 22,475.7 MW**



Operating Company Rates

- **Previous Billed Rate**
 - Rates effective July 1, 2016
 - billed July – December, 2016
 - \$84.88/MW-Day (2015 NSPL 24,725.1 MW)

- **Projected Rate update (PTRR)**
 - Rates effective January 1, 2017 Average B/E Projected Ratebase Balances (2016-2017) and Projected 2017 O&M Expense
 - billed January – December, 2017
 - \$99.63/MW-Day (2016 NSPL 22,475.7 MW)
 - 7% of increase due to higher PTRR, remaining due to lower NSPL

(Rates are Off-peak PTP daily rate.)



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Regulatory Changes

- **Depreciation rates revised for Kingsport Power Company**



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AEP.com Website Posting for Rates Effective January through December, 2017

[http://www.aep.com/about/codeofconduct/
OASIS/TariffFilings/](http://www.aep.com/about/codeofconduct/OASIS/TariffFilings/)

OATT Formula Rate

- Notice of Annual Filing
- Annual Update Customer Meeting Notice
- Formula Rate Update AEP Operating Companies Summary
- ATRR Summary of AEP Operating Companies
- Appalachian Power Company
- Indiana Michigan Power Company
- Kentucky Power Company
- Kingsport Power Company
- Ohio Power Company
- Wheeling Power Company
- Projected 2016-2017 ADIT Detail



Operating Company Rate Summary

Charge	July 1, 2016* 2015 FERC Form 1 (projected plant 2016 historical 2015)	Projected ** January 1, 2017 (projected B/E 2016/2017 plant)	Total Change and % Change
Point-to-Point Rate \$/MW-Month	\$2,581.64	\$3,030.54	\$448.90 17.4%
Schedule 12 ATRR	\$54,479,931	\$43,791,672	(10,688,259) (19.6)%
Schedule 1A	\$.0923/MWh	\$.1000/MWh	\$0.0077 8.3%
AEP East Zone Annual MWh	130,280,083 MWh	134,310,000 MWh	4,029,917 3.1%
AEP East Zone Network Service Peak Load	24,725.1 MW	22,475.7 MW	(2,249.4) (9.1)%

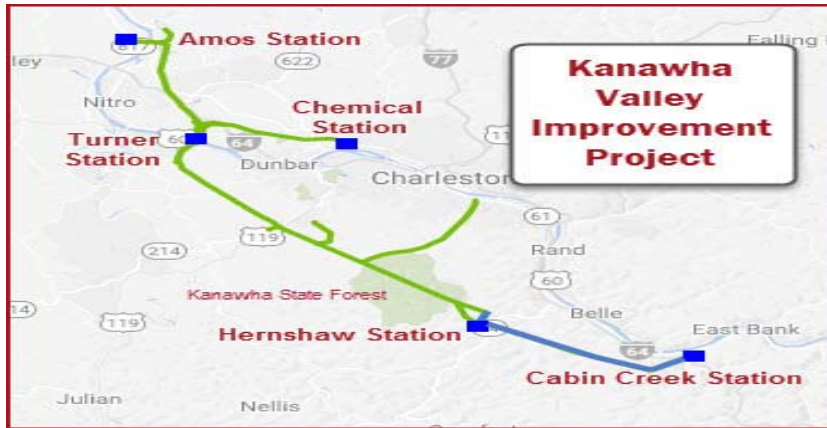
*Billed through end of 2016. **Billed starting January 1, 2017.



Reliability Enhancement “Baseline vs Backbone Project”

- **PJM’s RTEP, Regional Transmission Expansion Plan, identifies system additions and improvements needed to keep electricity flowing to millions of people.**
- **PJM “Backbone” projects are a subset of “Baseline” projects, identified by PJM to resolve a wide range of reliability criteria, violations, and market congestion issues.**
- **PJM specifically identifies system reliability issues and approves baseline projects to address them.**

Reliability Enhancement “Backbone Project”



b1660.1 - Rebuild Amos-Kanawha River 138kV corridor

Driver: Generator Deactivation

b2020 - Cloverdale – install 6 765kV breakers including incremental work for 2 additional breakers; reconfigure and relocate miscellaneous facilities; establish 500kV station and 500kV tie with 765kV station.

Driver: Baseline Load Growth Deliverability & Reliability

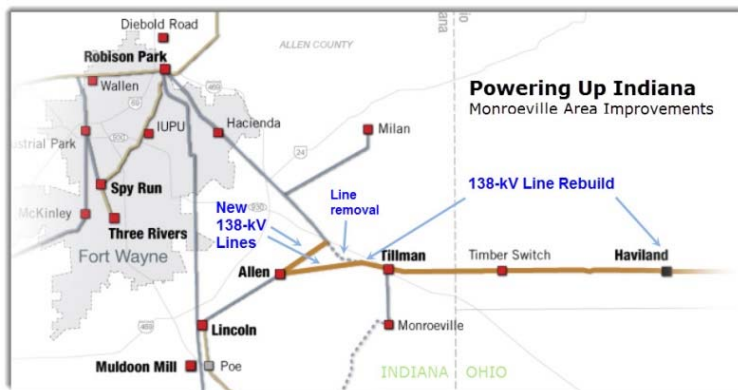


Reliability Enhancement “Baseline Project”



b1032.2 - Construct two 138kV outlets to Delano 138kV station and Circleville station; install new 138 kV breaker string at Delano station to terminate new line.

Driver: Baseline Load Growth Deliverability & Reliability



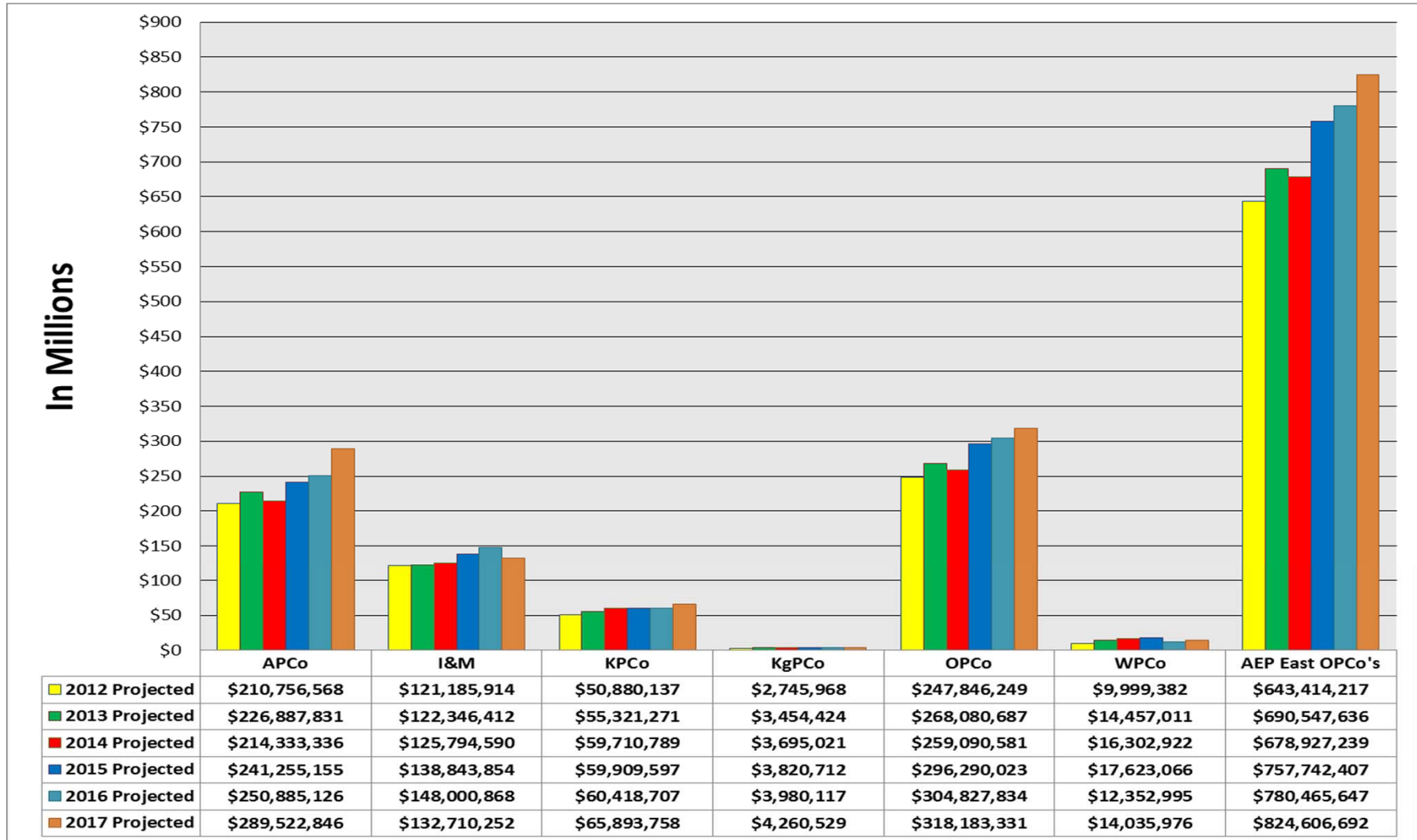
b1818 - Expand Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line

Driver: Baseline Load Growth Deliverability & Reliability



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Revenue Requirement (Summary Line 8) used to calculate the PTRR Revenue Requirement

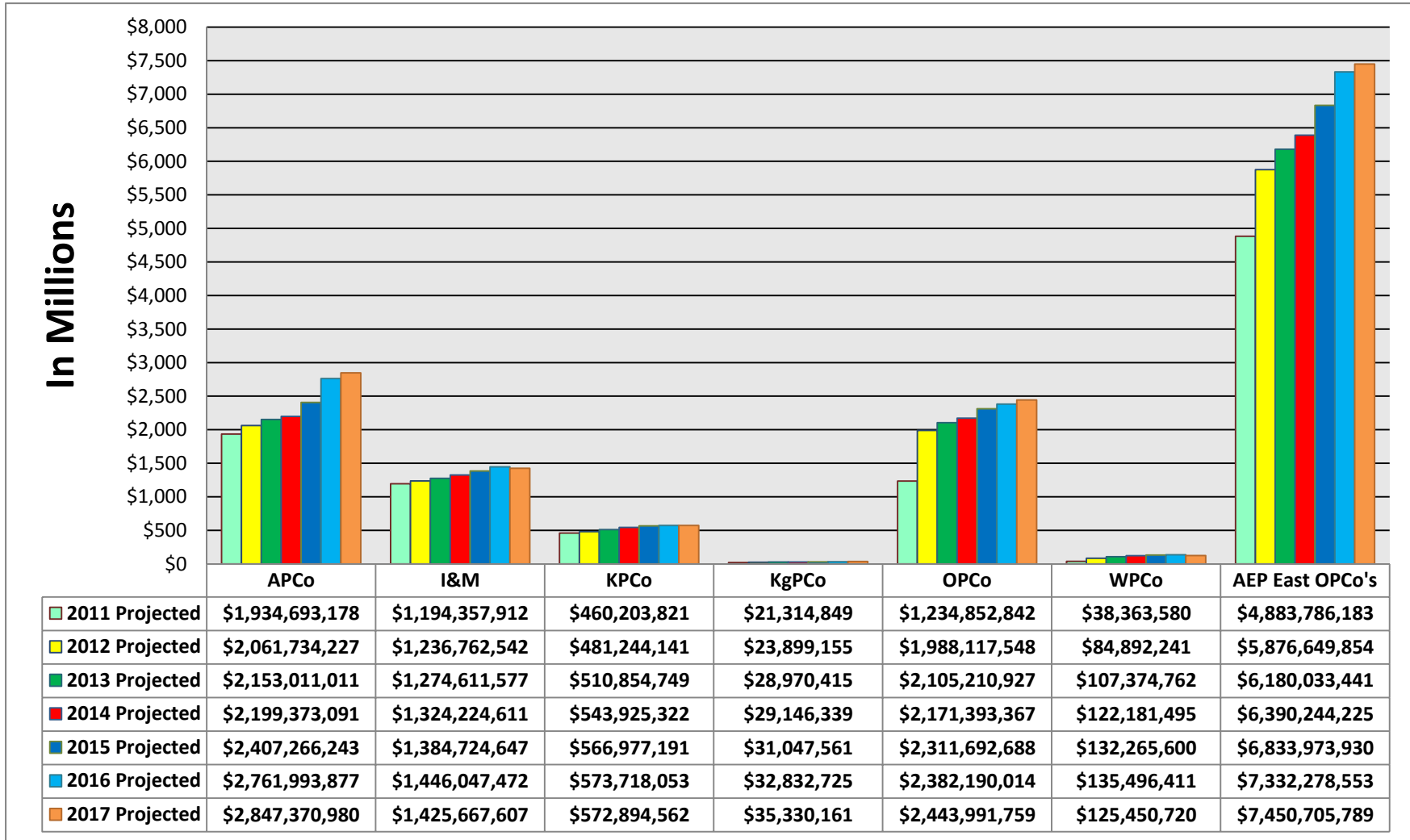




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Gross Plant Investment

Prior Year Projected vs. PTRR B/E Balance



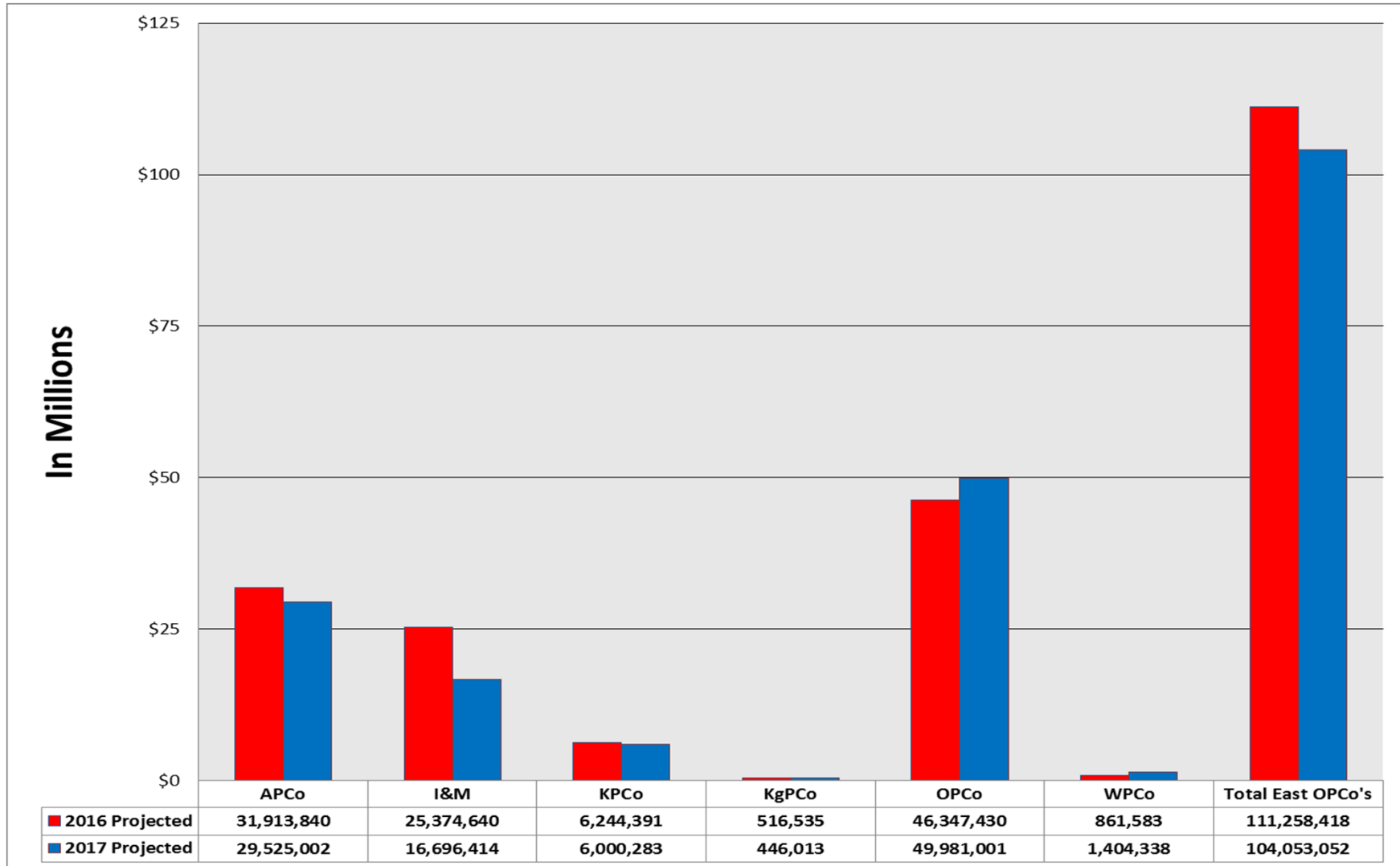
Includes allocated general and intangible plant investment.



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Transmission O&M Expense

2016 Projected (Actual 2015) vs 2017 Projected





Schedule 1A

Line No.		AEP Annual Revenue Requirement
A. Schedule 1A ARR		
1	Total Load Dispatch & Scheduling (Account 561) (TCOS Line 15)	\$32,427,739
2	Less: Load Disptach - Scheduling, System Control and Dispatch Services (321.88.b)	\$14,705,536
3	Less: Load Disptach - Reliability, Planning & Standards Development Services (321.92.6)	\$3,713,590
4	Total 561 Internally Developed Costs (Ln 1 - Ln 2 - Ln 3)	\$14,008,613
5	Less: PTP Service Credit	\$393,497
6	EXISTING ZONAL ARR (Ln 4 - Ln 5)	\$13,615,116
7	PRIOR YEAR TRUE-UP with Interest	-\$178,537
8	Net Schedule 1A Revenue Requirement for Zone	\$13,436,579
B. Schedule 1A Rate Calculations		
9	2017 AEP East Zone Annual MWh	134,310,000 MWh
10	AEP Zone Rate for Schedule 1A Service. (Line 8 / Line 9)	\$0.1000



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Questions?



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Transmission Formula Rate

AEP East
Transmission Companies
Appalachian, Indiana Michigan,
Kentucky, Ohio and West Virginia
Annual Update March 24, 2017



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Section 205 FERC Filing

- AEP filed Section 205 November 22, 2016, modifying Attachment H-20A and H-20B of the PJM OATT
- FERC issued an Order March 10, 2017, accepting (subject to refund) those modifications
- AEP calculated its **Projected Transmission Revenue Requirement (PTRR)** for rates effective January 1, 2017



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TransCo Rates

- **Previous “Billed” Rate**
 - Rates effective July 1, 2016
 - billed July – December, 2016
 - \$39.91/MW-Day (2015 NSPL 24,725.1 MW)

- **Projected Rate update (PTRR)**
 - Rates effective January 1, 2017 with Average B/E “Projected” Ratebase Balances (2016-2017) and O&M “Projected” 2017 Expense
 - billed January – December, 2017
 - \$56.51/MW-Day (2016 NSPL 22,475.7 MW)
 - 29% increase due to higher PTRR, remaining due to lower NSPL

(Rates are Off-peak PTP daily rate.)



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AEP.com Website Posting

for TransCo Rates Effective January - December, 2017

- <http://www.aep.com/about/codeofconduct/OASIS/TariffFilings/>
- **Notice of Annual Filing**
- **Formula Rate Update AEP Transmission Companies Summary**
- **ATRR Summary of AEP TransCo East Formula Rates**
- **Appalachian Transmission Company**
- **Indiana Michigan Transmission Company**
- **Kentucky Transmission Company**
- **Ohio Transmission Company**
- **West Virginia Transmission Company**
- **Projected 2016-2017 ADIT TransCo Detail**



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TransCo Rate Summary

Charge	July 1, 2016 * 2015 FERC Form 1 (projected plant 2016)	Projected ** January 1, 2017 (projected B/E plant)	Total Change and % Change
Point-to Point Rate \$/MW-Month	\$1,213.79	\$1,718.74	\$504.95 41.6%
Schedule 12	\$124,875,434	\$152,074,418	\$27,198,984 21.8%
AEP East Zone Network Service Peak Load in MW	24,725.1 MW	22,475.7 MW	(2,249.4) (9.1)%

*Billed through end of 2016.

**Billed starting January 1, 2017.

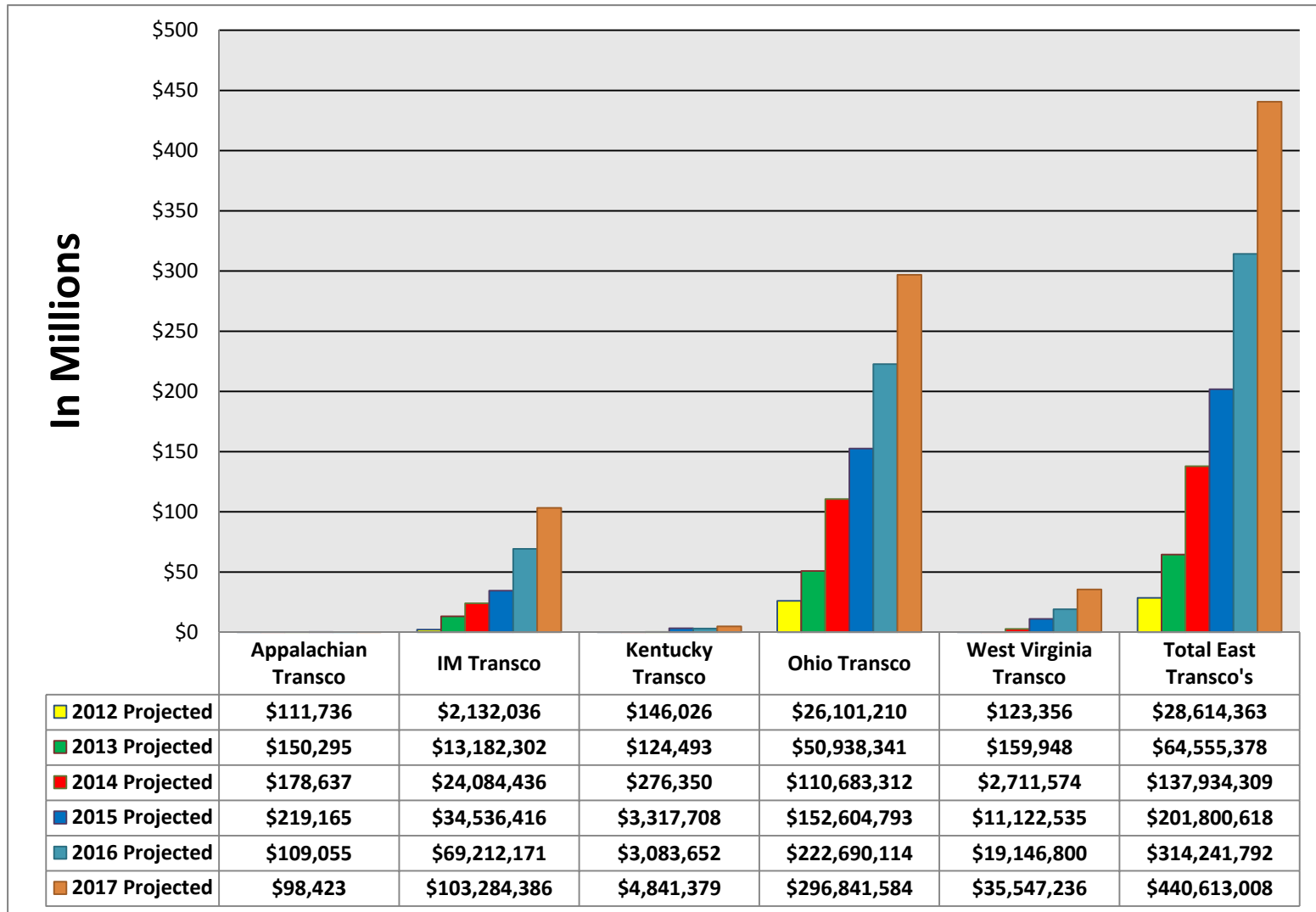
Primary Drivers of Rate Change

- **Increased capital spend in AEP I&M TransCo, AEP Kentucky TransCo, AEP Ohio TransCo and AEP West Virginia TransCo**
- **Increase in Expense**
 - Increase in O&M Expense
 - Increase in Depreciation Expense
 - Increase in Property Taxes
- **Network Service Peak Load (“NSPL”)**
 - 9.1% decrease in 2016 NSPL
 - 24,725.1 MW (2015 NSPL) to 22,475.7 MW (2016 NSPL)



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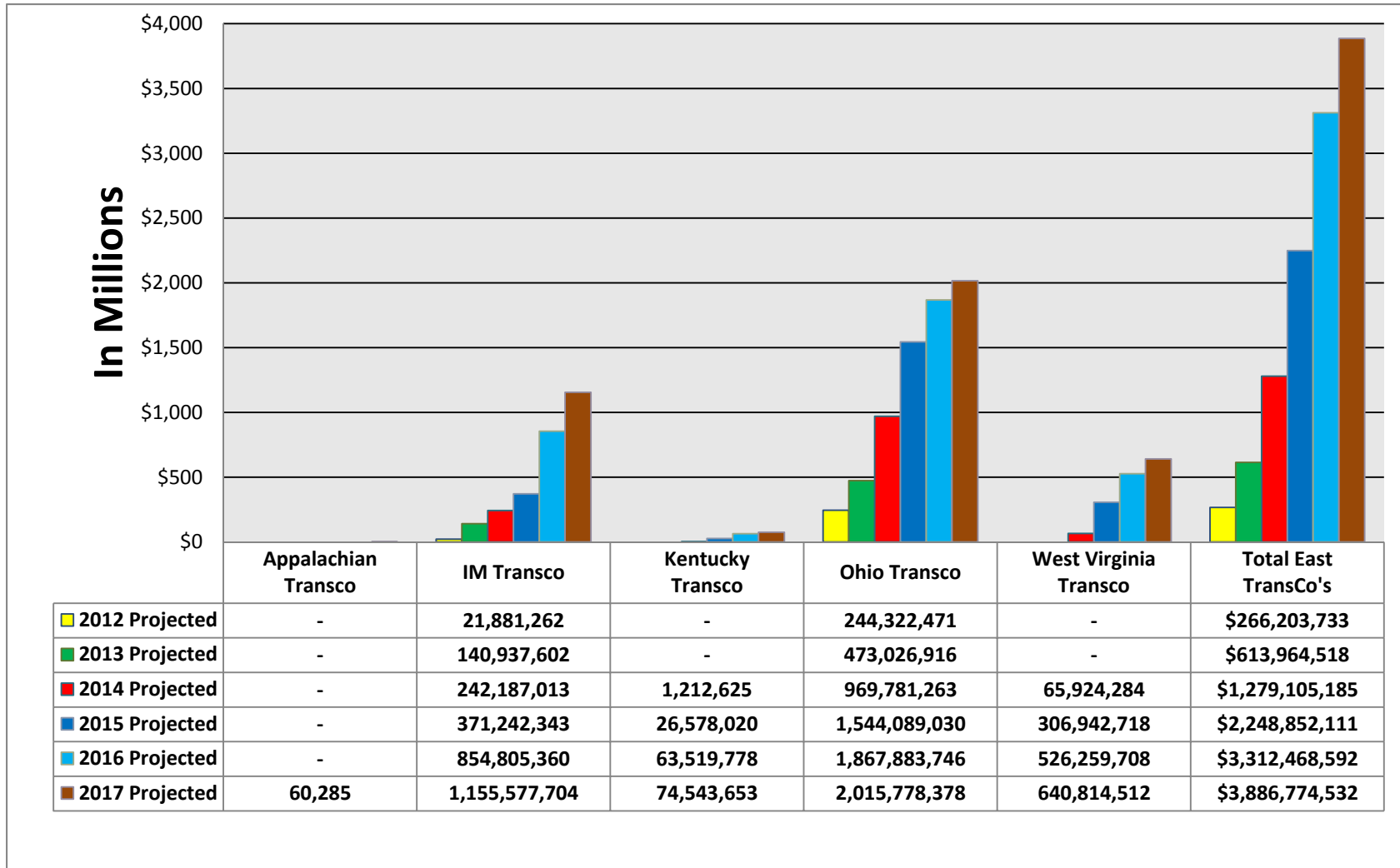
Revenue Requirement (Summary Line 8) used to calculate the PTRR Revenue Requirement





Gross Plant Investment

Prior Year Projected vs. PTRR B/E Balance

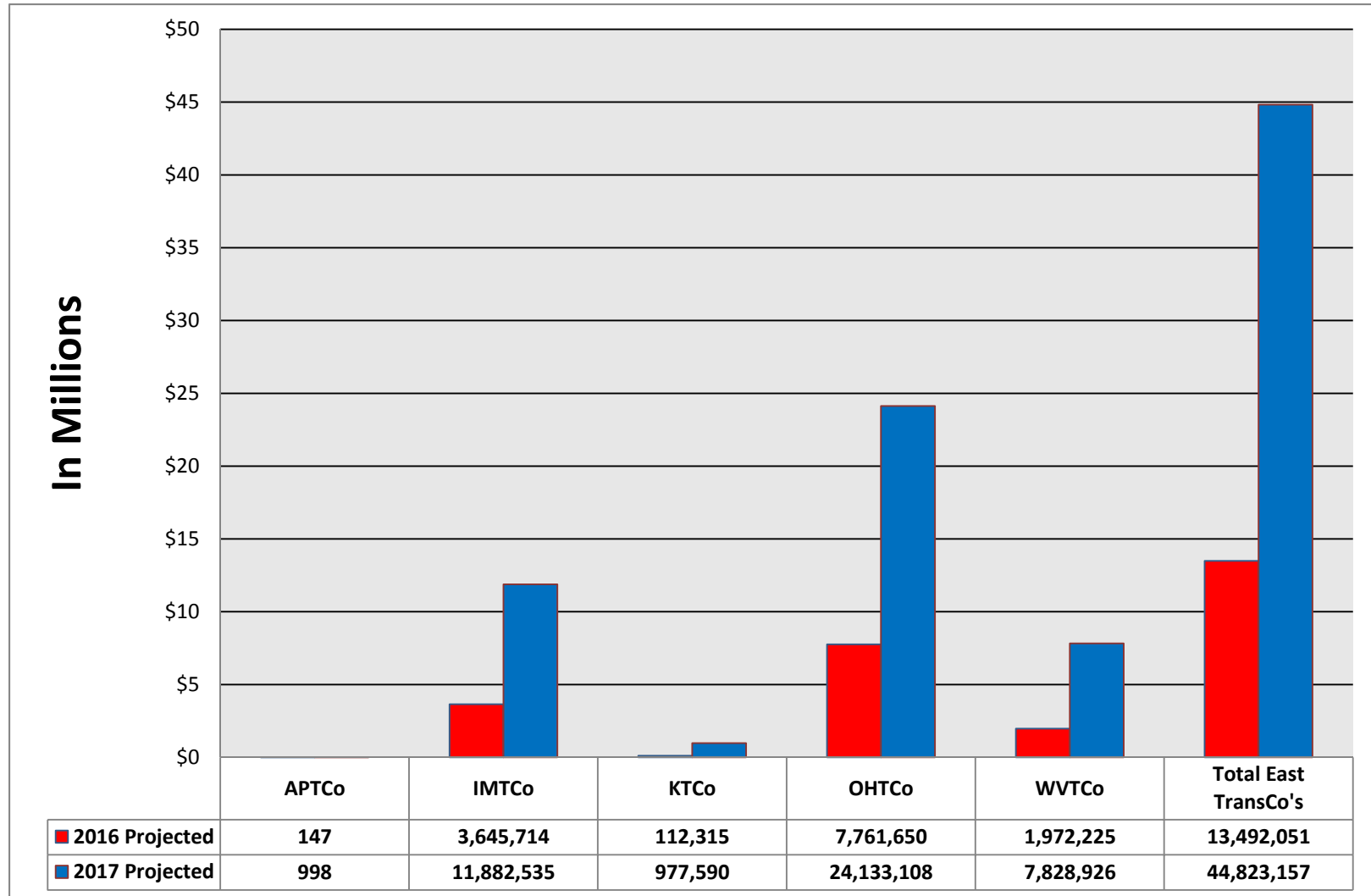




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Transmission O&M Expense

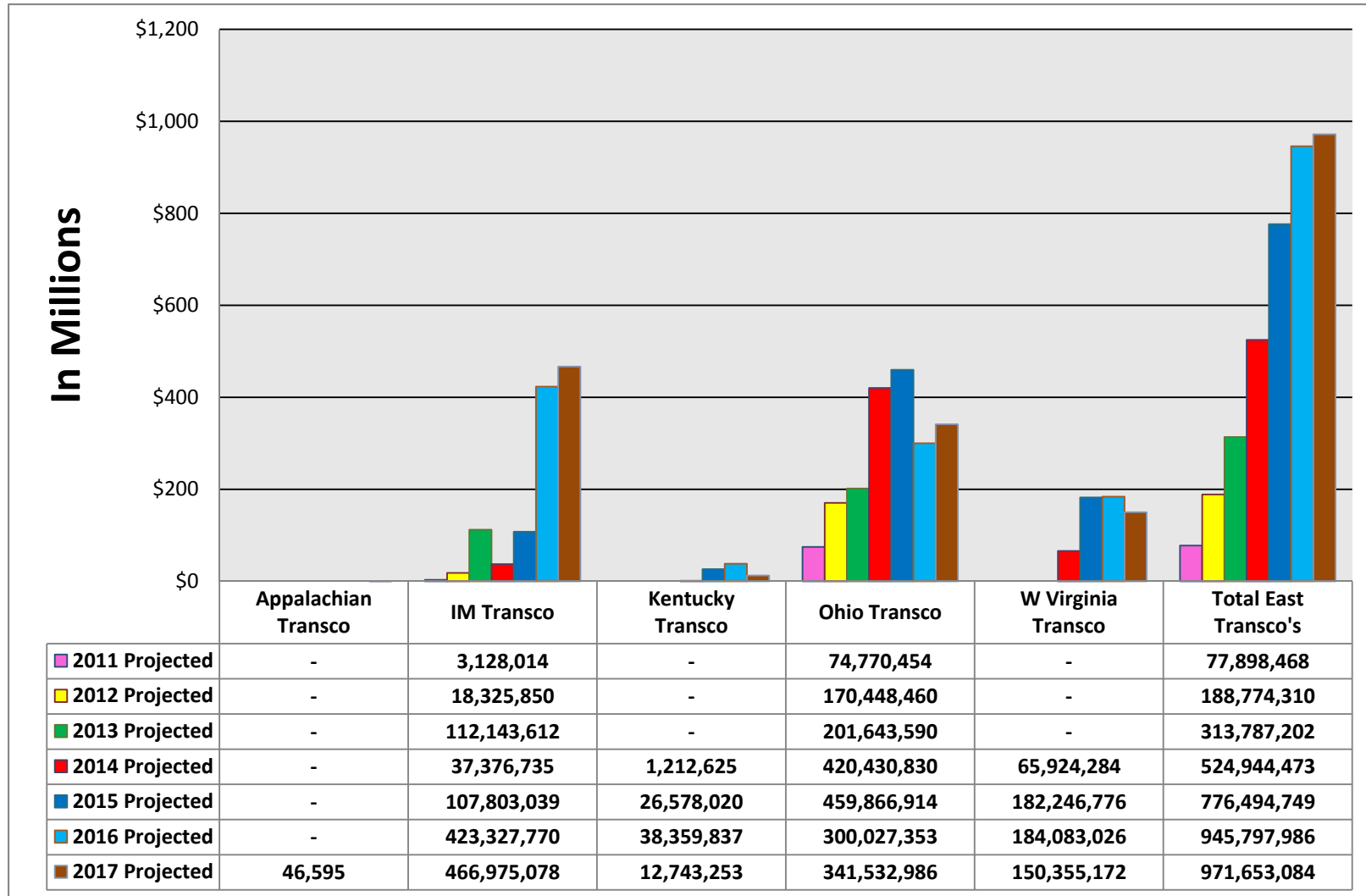
2016 Projected (Actual 2015) vs 2017 Projected





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Projected Plant Additions



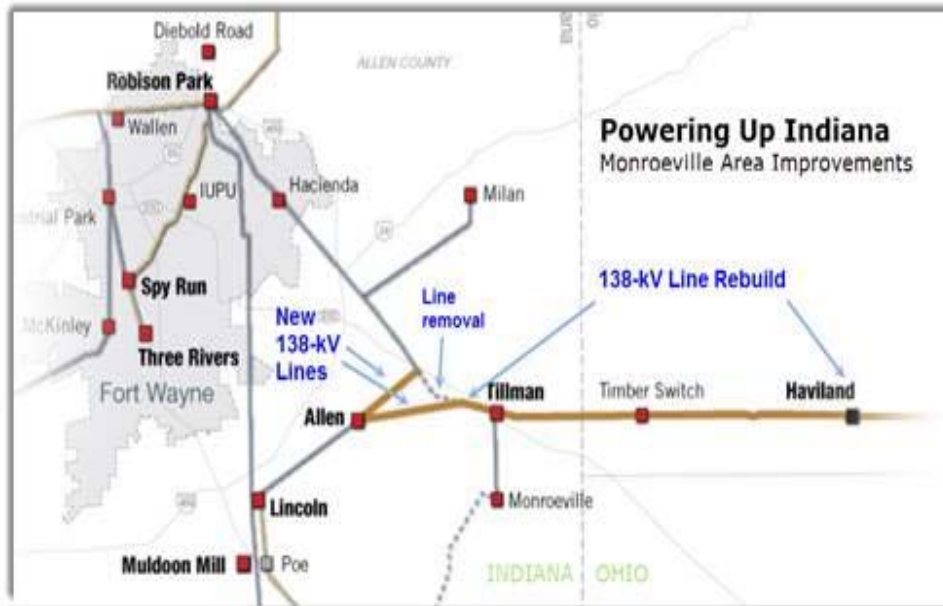
Reliability Enhancement “Backbone Project”



**b1465.1 - Add a third 2250 MVA
765/345 kV transformer at
Sullivan station and
345 kV switching changes at
Sullivan/Breed**

Driver: Baseline Load Growth Deliverability & Reliability

Reliability Enhancement “Baseline Project”

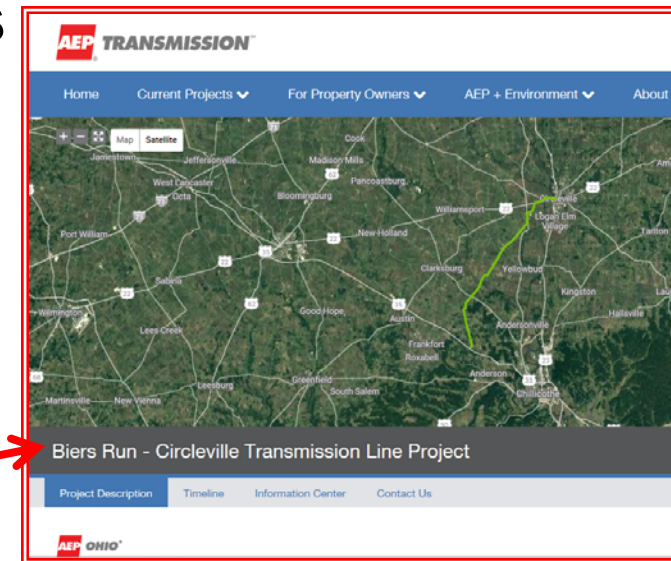
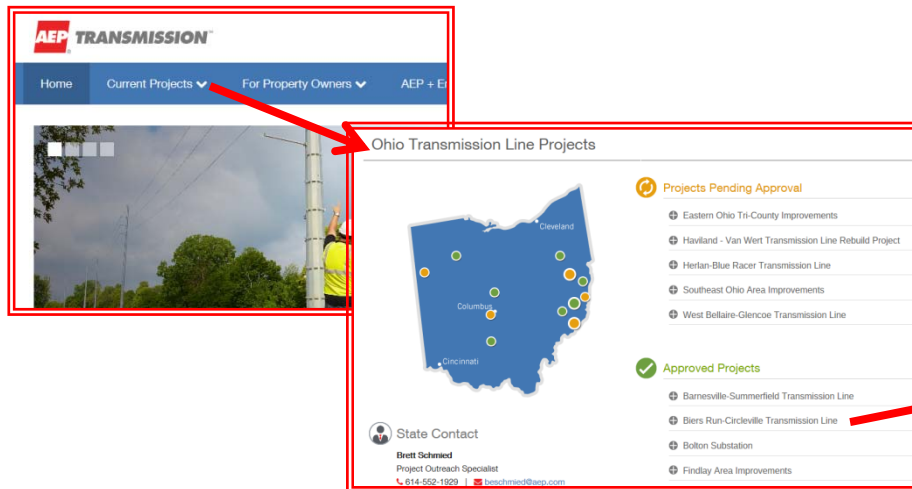


- **B1818 - Expand the Allen station, install a second 345/138 kV transformer, add four 138 kV exits, cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line**

- **b2423 - Install a 300 MVAR shunt reactor at AEP's Wyoming 765 kV station**
- **b2230 - Replace existing 150 MVAR reactor at Amos 765 kV with 300 MVAR reactor**

AEP Projects Website

- A valuable resource for Transmission project information around the system:
 - <http://aeptransmission.com/index.php>
 - Current Projects by state (*not all inclusive*)
 - Project specific websites





Questions

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