

# BOUNDLESS ENERGY

### Goldman Sachs Power and Utilities Conference

New York, NY August 13, 2019

#### "Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995



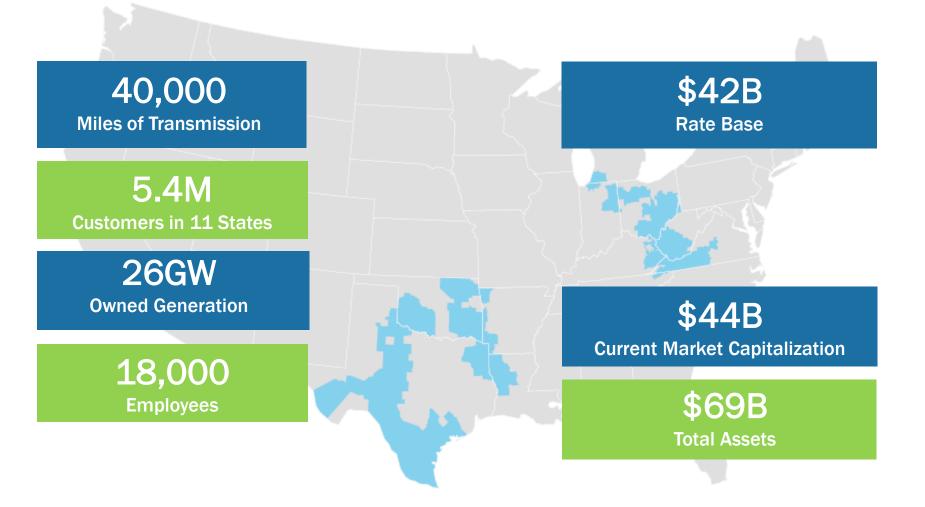
This presentation contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Although AEP and each of its Registrant Subsidiaries believe that their expectations are based on reasonable assumptions, any such statements may be influenced by factors that could cause actual outcomes and results to be materially different from those projected. Among the factors that could cause actual results to differ materially from those in the forward-looking statements are: changes in economic conditions, electric market demand and demographic patterns in AEP service territories, inflationary or deflationary interest rate trends, volatility in the financial markets, particularly developments affecting the availability or cost of capital to finance new capital projects and refinance existing debt, the availability and cost of funds to finance working capital and capital needs, particularly during periods when the time lag between incurring costs and recovery is long and the costs are material, decreased demand for electricity, weather conditions, including storms and drought conditions, and the ability to recover significant storm restoration costs, the cost of fuel and its transportation, the creditworthiness and performance of fuel suppliers and transporters and the cost of storing and disposing of used fuel, including coal ash and spent nuclear fuel, the availability of fuel and necessary generation capacity and performance of generation plants, the ability to recover fuel and other energy costs through regulated or competitive electric rates, the ability to build or acquire renewable generation, transmission lines and facilities (including the ability to obtain any necessary regulatory approvals and permits) when needed at acceptable prices and terms and to recover those costs, new legislation, litigation and government regulation, including oversight of nuclear generation, energy commodity trading and new or heightened requirements for reduced emissions of sulfur, nitrogen, mercury, carbon, soot or particulate matter and other substances that could impact the continued operation, cost recovery and/or profitability of generation plants and related assets, evolving public perception of the risks associated with fuels used before, during and after the generation of electricity, including nuclear fuel, timing and resolution of pending and future rate cases, negotiations and other regulatory decisions, including rate or other recovery of new investments in generation, distribution and transmission service and environmental compliance, resolution of litigation, the ability to constrain operation and maintenance costs, prices and demand for power generated and sold at wholesale, changes in technology, particularly with respect to energy storage and new, developing, alternative or distributed sources of generation, the ability to recover through rates any remaining unrecovered investment in generation units that may be retired before the end of their previously projected useful lives, volatility and changes in markets for coal and other energy-related commodities, particularly changes in the price of natural gas, changes in utility regulation and the allocation of costs within regional transmission organizations, including ERCOT, PJM and SPP, changes in the creditworthiness of the counterparties with contractual arrangements, including participants in the energy trading market, actions of rating agencies, including changes in the ratings of debt, the impact of volatility in the capital markets on the value of the investments held by the pension, other postretirement benefit plans, captive insurance entity and nuclear decommissioning trust and the impact of such volatility on future funding requirements, accounting pronouncements periodically issued by accounting standard-setting bodies, and other risks and unforeseen events, including wars, the effects of terrorism (including increased security costs), embargoes, naturally occurring and human-caused fires, cyber security threats and other catastrophic events.

#### **INVESTOR RELATIONS**

Bette Jo Rozsa

Managing Director Investor Relations 614-716-2840 bjrozsa@aep.com Darcy Reese Director Investor Relations 614-716-2614 dlreese@aep.com Tom Scott Director Investor Relations 614-716-2686 twscott@aep.com





Statistics as of December 31, 2018 except for market capitalization as of August 7, 2019

### Leading the Way



#### Strong Execution Track Record



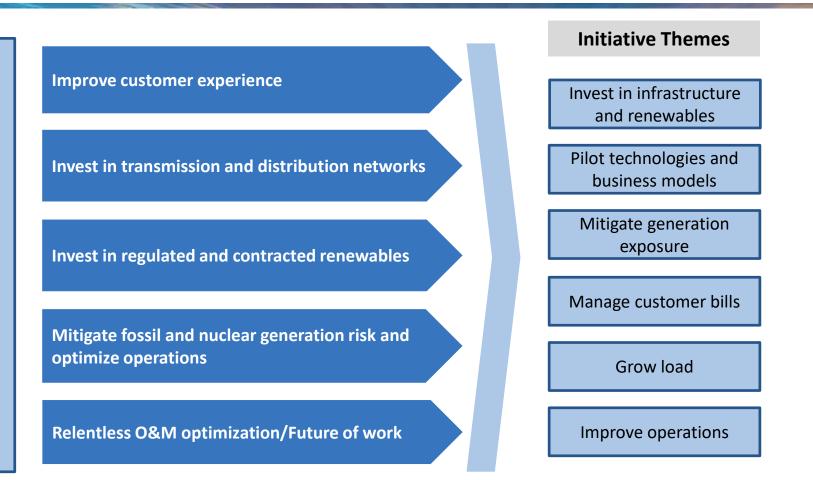
#### AEP Leading the Way Forward

Confidence in Steady and Predictable Earnings Growth Rate of 5-7%	Commitment to Growing Dividend Consistent with Earnings	Well Positioned as a Sustainable Regulated Business	Compelling Portfolio of Premium Investment Opportunities
---	--	---	---

#### Strategic Vision 2023

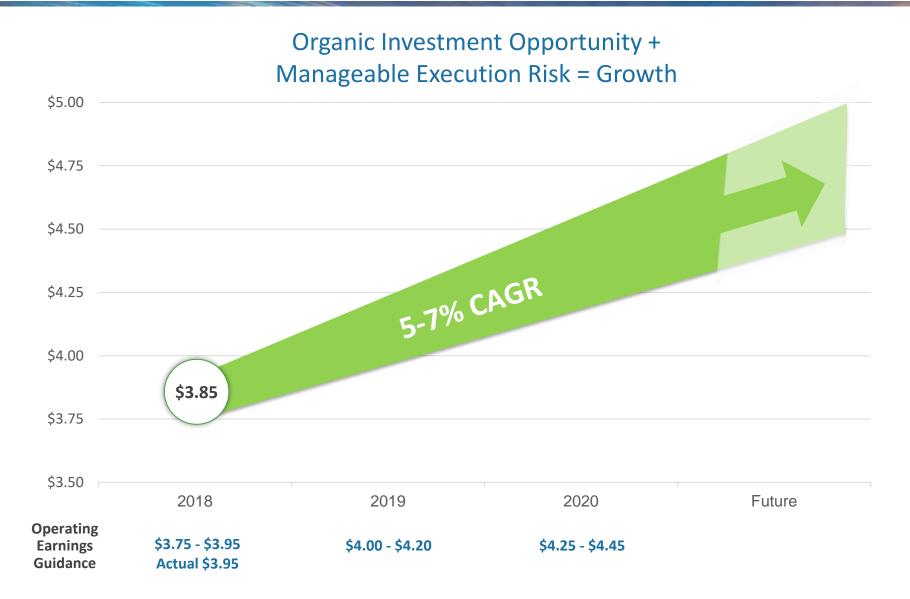
**Execute Strategy** 





We are focused on executing our strategy while improving the customer experience





#### Strong Dividend Growth





#### **EPS Growth + Dividend Yield = 9 to 10% Annual Return Opportunity**

\* Subject to Board approval

## **ROSITIONING FOR THE FUTURE**

77

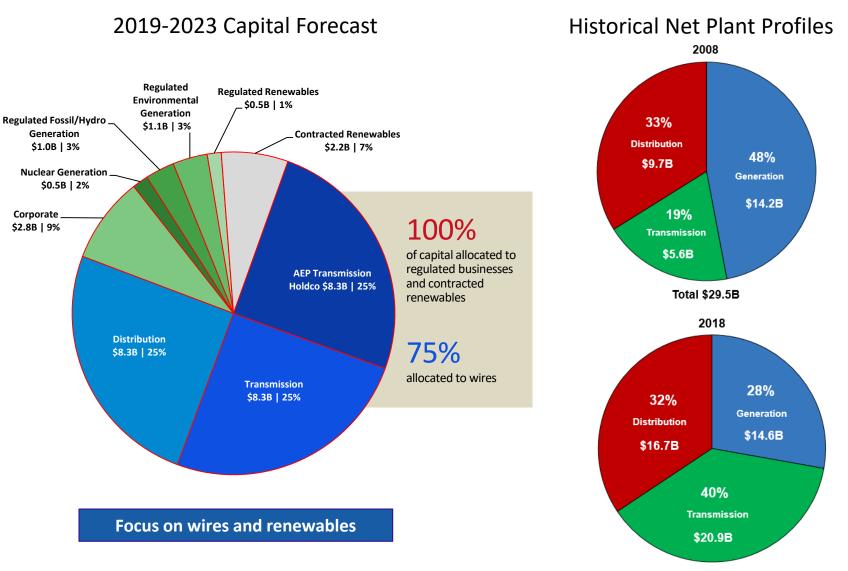
## **CAPITAL INVESTMENT OPPORTUNITIES**



Transmission	Grid modernization, aging infrastructure, physical/cyber security, reliability, market efficiency and economic development projects
Distribution	Grid modernization, reliability improvement projects and distribution station refurbishment
Renewables	Regulated renewables supported by integrated resource plans and contracted renewables
Technology	Digitization, automation, cyber security, enterprise-wide applications

## 2019-2023 Capital Forecast of \$33B and Net Plant







### 2019-2023 Capital Forecast by Subsidiary



\$ in millions (excluding AFUDC)	2019E	2020E	2021E	2022E	2023E	Total
Appalachian Power Company	\$821	\$786	\$847	\$939	\$875	\$4,267
Wheeling Power Company	\$42	\$43	\$52	\$56	\$33	\$226
Kingsport Power Company	\$17	\$15	\$21	\$19	\$25	\$97
Indiana Michigan Power Company	\$647	\$609	\$611	\$519	\$506	\$2,892
Kentucky Power Company	\$220	\$229	\$227	\$228	\$226	\$1,130
Ohio Power Company	\$720	\$554	\$600	\$640	\$694	\$3,208
Public Service Company of Oklahoma	\$339	\$365	\$338	\$487	\$450	\$1,978
Southwestern Electric Power Company	\$421	\$473	\$523	\$587	\$675	\$2,679
AEP Texas Company	\$1,271	\$1,031	\$1,069	\$1,146	\$1,245	\$5,763
AEP Generating Company	\$72	\$40	\$29	\$24	\$10	\$175
AEP Transmission Holdco	\$1,590	\$1,536	\$1,578	\$1,719	\$1,829	\$8,252
Generation and Marketing	\$1,627	\$127	\$183	\$132	\$133	\$2,202
Other	\$10	\$6	\$6	\$6	\$4	\$32
Total Capital and Equity Contributions	\$7,795	\$5,815	\$6,084	\$6,503	\$6,705	\$32,902

Capital plans are continuously optimized which may result in redeployment between functions and companies. Table may not foot due to rounding.

### **Cash Flows and Financial Metrics**



\$ in millions	2019E	2020E		2021E	2022E
Cash from Operations	\$ 4,700	\$ 4,900	\$	5,300	\$ 5,800
Capital & JV Equity Contributions *	(7,300)	(5,800)		(6,100)	(6,500)
Other Investing Activities	(300)	(400)		(100)	(100)
Common Dividends **	(1,300)	(1,300)		(1,300)	(1,400)
Excess (Required) Capital	\$ (4,200)	\$ (2,600)	\$	(2,200)	\$ (2,200)
Financing					
Excess (Required) Capital	\$ (4,200)	\$ (2,600)	\$	(2,200)	\$ (2,200)
Debt Maturities (Senior Notes, PCRBs)	(1,100)	(900)		(1,500)	(1,600)
Securitization Amortizations	(300)	(200)		(100)	(100)
Equity Units ***	800	-		-	-
Equity Units Conversion	-	-		-	800
Equity Issuances - Includes DRP/401(k)	100	100		100	500
Debt Capital Market Needs (New)	\$ (4,700)	\$ (3,600)	\$	(3,700)	\$ (2,600)
Financial Metrics					
Debt to Capitalization (GAAP)		55% - 6	50%		
FFO/Total Debt (Moody's)		Mid Te	ens		

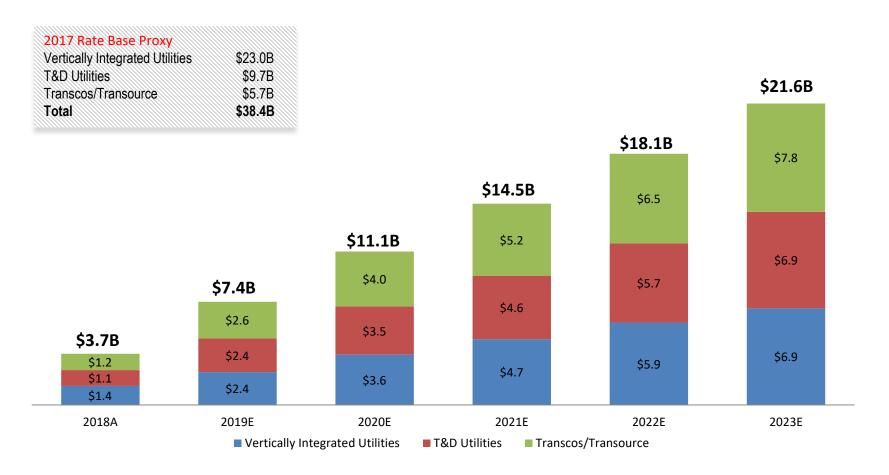
\* Estimates are based on current capital expenditure program. 2019 capital expenditures reflect \$551M purchase price and excludes recently announced contracted renewables transaction minority interest and JV project debt.

\*\* Common dividends \$2.68/share 2019-2022. Dividends evaluated by Board of Directors each quarter; stated target payout range is 60%-70%.

\*\*\* \$700M offering and exercise of over-allotment.



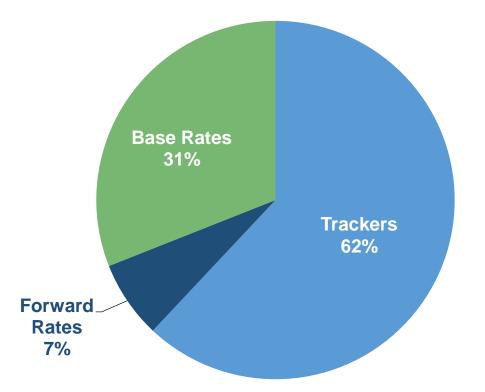
Cumulative Change from 2017 Base



5% - 7% EPS growth is predicated on regulated rate base growth

#### **Efficient Cost Recovery Mechanisms**





#### Nearly 70% of 2019-2023 capital plan recovered through reduced lag mechanisms

## **INVESTING IN TRANSMISSION**

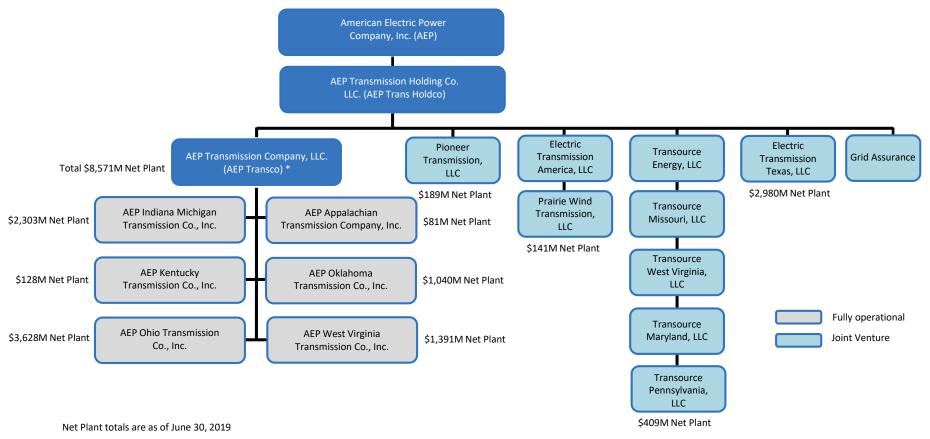


### AEP Transmission Holdco Legal Entity Structure



AEP Transmission Company, LLC (AEP Transco) is wholly-owned by AEP Transmission Holding Company, LLC (AEP Trans Holdco)

AEP Trans Holdco is a wholly-owned subsidiary of American Electric Power Company, Inc. (AEP), one of the largest utility holding companies in the U.S.



\* Debt issued at AEP Transco level for transmission companies

### **Transmission Priorities**

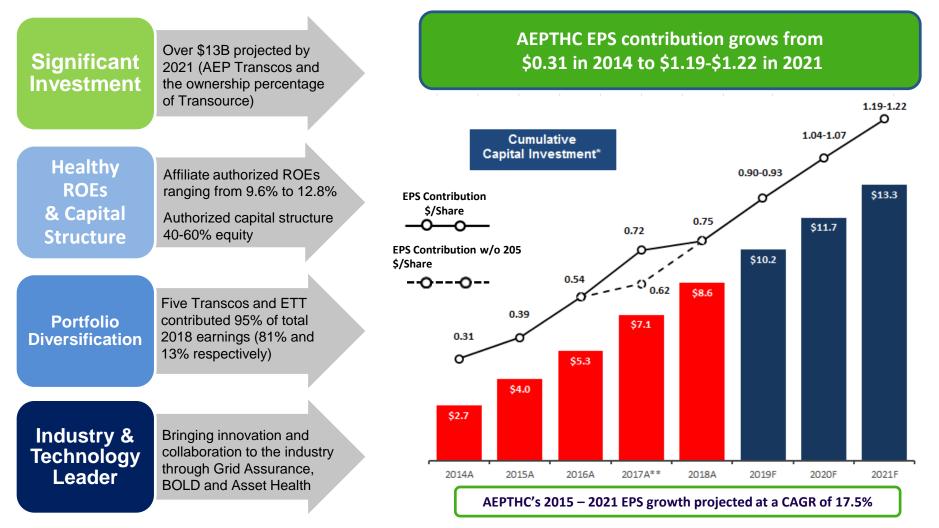


Strategy	Execution	Results
Infrastructure Investment	Targeted Capital Investments Local Reliability, Telecom modernization, Asset Health	Improved Reliability/Resiliency Earnings Growth Efficient Cost Recovery
Customer Experience	Improve Reliability, SCADA technology, security across the transmission system, Economic Development	Modernize grid reducing equipment failures/outages, community impact, customer relations
Innovative Technologies/Solution	G&T Integrated Solutions Public Power Solutions	Industry Leadership Customer Solutions
Non-Traditional Growth	Pririe Wind Transmission April Venue batterer Wester Energy, and EA TRÊNSOURCE.	Investment & Customer Diversity

The nation's largest transmission services provider is focused on delivering its \$3 billion annual capital plan to improve customer reliability and grid resiliency while meeting earnings growth targets through diversified investments.

#### AEPTHC Target Earnings 2018 - 2021





\* Capital investment excludes Transource unapproved projects, JV equity contributions, BOLD and Grid Assurance.

\*\* In addition to forward looking rates, 2017 includes a historical true up for East Transcos. Having both in one year is a one time occurrence.

#### **Transmission Investment Drivers**





AEP's 15 state asset base serves as the foundation of the nation's electric system. FERC's support of transmission investments recognizes the critical function transmission plays in the power delivery system.

### **Transmission Investment Categories**

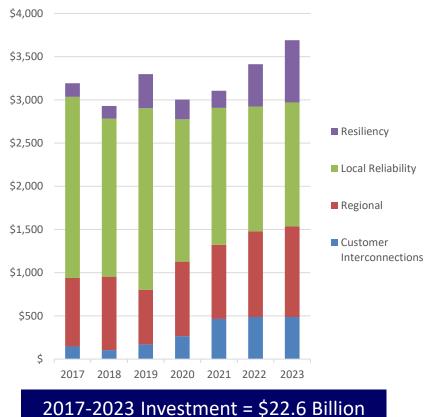


## As the foundation of the power system, transmission integrates generation and loads across large regional footprints.

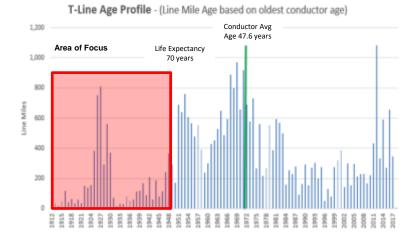
- <u>Growing complexity of the integrated power grid</u>: distributed generation, diversity in generation fleet, location and variability of generation
- <u>System operations</u>: Systems operating close to feasibility limits are more vulnerable (failures/intelligent adversaries)
- <u>Survivability</u>: Systems ability to survive contingencies without customer interruption

#### **Major Issues Being Addressed**

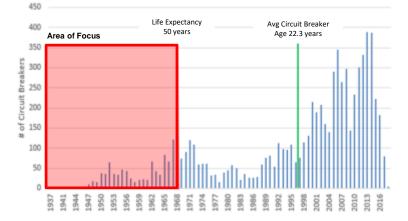
- Aging transmission facilities in poor condition
- Reduction of radial transmission sources
- NERC/RTO requirements
- Decrease customer exposure to Transmission outages
- Improve response time
- Enhance operability of the system







Circuit Breaker Age Profile



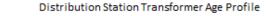
Transmission	Line Miles	Transformers	Circuit Breakers
Life Expectancy (years)	70	60	50
Current Quantity over Life Expectancy	6,085	234	998
Quantity that will exceed Life Expectancy in next ten years	5,057	133	653
Total Renewal Opportunity over ten years	11,142	367	1,651

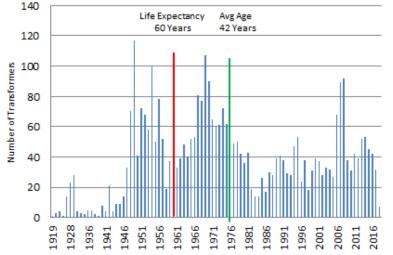
\$2.3 billion of annual investment, addresses the facilities past their estimated life expectancy; the asset age profile changes with actual investment

Scope and scale of AEP's Transmission network results in sustainable investment opportunity without risk of over-investment

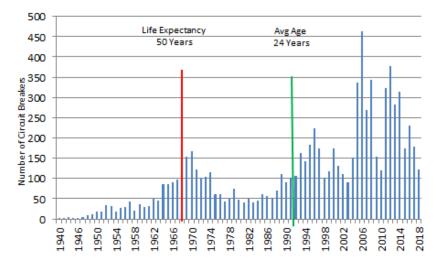
## **INVESTING IN DISTRIBUTION**







Distribution Station Circuit Breaker Age Profile



Distribution	Station Transformers	Circuit Breakers
Life Expectancy (years)	60	50
Current Quantity over Life Expectancy	923	993
Quantity that will exceed Life Expectancy in next ten years	514	977
Total Renewal Opportunity over ten years	1,437	1,970

- Grid Modernization
  - Distribution Supervisory
     Control and Data Acquisition
  - Smart Circuits
- Distribution Line Re-Conductoring
  - Replace deteriorated small wire
  - Increase capacity to facilitate ties for smart circuits
  - Over 86,000 miles of small wire is in service across the operating companies (age profile at least 40 years)

- Pole Replacement Programs
- Obsolete Station Breaker Replacements
- Capacity/Reliability Projects
- Distribution Station Transformers

Represents ~ \$500M/year of incremental investment opportunity to improve system reliability and modernize the system



## INVESTING IN REGULATED RENEWABLES

### North Central Wind Overview





Jurisdiction (Docket #)	MW	% of Project
PSO (PUD 2019-00048)	675	45.5%
SWEPCO – AR (19-035-U)	155	10.4%
SWEPCO – LA (U-35324)	268	18.1%
SWEPCO – TX (49737)	309	20.8%
SWEPCO - FERC	78	5.2%
Total:	1,485	100%

7/15/19 Filings in AR, LA, OK & TX	Q3 2019 – Q3 2020 Regulatory Activity	Dec 2020 Sundance completion & purchase	Dec 2021 Traverse & Maverick completion & purchase
	2019	2020	2021

SWEPCO and PSO Regulated Wind Investment Opportunity						
Total Rate Base Investment	~\$2 billion (1,485 MW)					
	<u>Name</u>	MW	<u>Investment</u>	In-Service		
North Central Wind	Sundance	199	\$307M	EOY 2020 (100% PTC)		
	Traverse	999	\$1,287M	EOY 2021		
	Maverick	287	\$402M	(80% PTC)		
Net Capacity Factor	44.0%					
Customer Savings	~\$3 billion (30-year nominal \$)					
Developer	Invenergy					
Turbine Supplier			GE			

- Regulated rate base wind investment opportunity with ability to meaningfully reduce customer rates
  - Acquiring facilities on a fixed cost, turn-key basis at completion
  - Contingent upon satisfactory regulatory approvals
- □ Investment not included in the Company's current capital expenditure plan
- Acquisition can be scaled, subject to commercial limitations, to align with individual state resource needs and approvals

Two solar REPAs with both facilities on line by end of 2021:

- Highland Solar, 300 MW
- Willowbrook Solar, 100 MW
- Debt Equivalency Cost Mechanism to provide recovery for use of Balance Sheet (approximately \$6M annually)
- Green Tariff that allows all customer classes the opportunity to purchase RECs to cover some or all of their generation supply
- □ Analysis resulted in nominal savings of over \$200M over the life of the projects when considering base band pricing



Ohio Power Service Territory



#### **Projected Resource Additions**



Solar Additions (MW) 🌞						
Operating Co:	2020- 2022	2023- 2027	2028- 2030			
AEP Ohio	400 *	-	-			
APCo	15	300	750			
1&M	150	600	550			
КРСо	20 *	30	40			
PSO	11	600	600			
SWEPCO	-	-	300			
Totals	596	1,530	2,240			

Wind Additions (MW) 🌉						
Operating Co:	2020- 2022	2023- 2027	2028- 2030			
AEP Ohio	500 *	-	-			
APCo	-	300	-			
1&M	300	150	300			
КРСо	-	-	-			
PSO	675 *	400	200			
SWEPCO	810 *	600	-			
Totals	2,285	1,450	500			

Natural Gas Additions (MW)  🏑				
Operating Co:	2020- 2022	2023- 2027	2028- 2030	
1&M	18	18	788	
PSO	373 (1)	410 (1)	-	
Totals	391	428	788	

<sup>(1)</sup> To replace expiring PPA

Total Projected Resource Additions (MW)			
Resource	2020-2030		
Solar	4,366		
Wind	4,235		
Natural Gas	1,607		
Totals	10,208		

Updated 08/01/2019

\* Subject to regulatory filings currently underway

恕

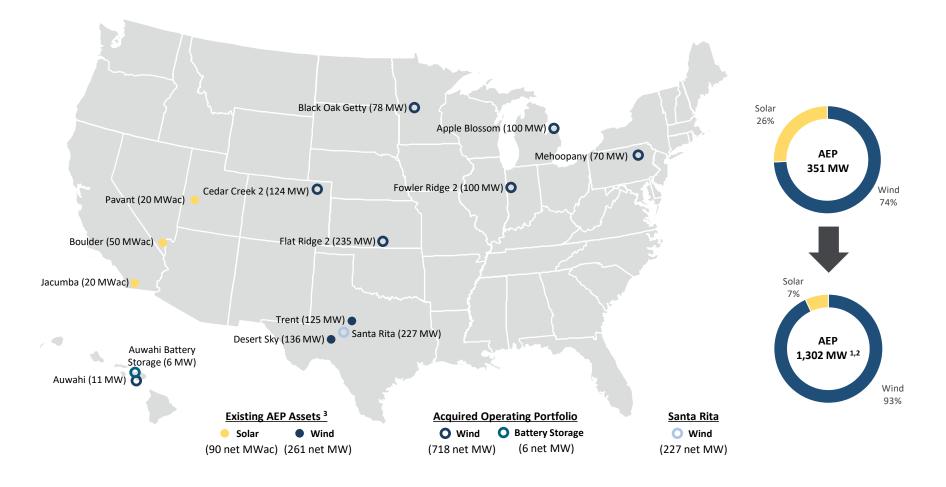
IRPs Underway/Planned					
Previously Approved IRPs	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19
A A EP Company BOUNDLESS ENERGY KENTUCKY An AEP Company BOUNDLESS ENERGY	AN ARP Company BOUNDLESS ENERGY: 12/14/18 (AR) PUBLIC SERVICE OKLABAMOMA BOUNDLESS ENERGY: 12/21/18		AT ALEP Company BOUNDLESS ENERGY 5/1/19 (VA) INDIANA MICHIGAN MICHIGAN DOUNDLESS ENERGY BOUNDLESS ENERGY July / Aug 2019	SOUTHWESTERN ELECTRIC POWER COMPANY BOUNDLESS ENERGY 8/15/19 (LA)	An AEP Company BOUNDLESS ENERGY 12/20/19

Next IRP filing date for APCo (WV) is January 2021

## **INVESTING IN COMPETITIVE BUSINESS**



Large Scale Project Map with Recently Announced Contracted Renewables Transaction



Projects complement AEP's existing footprint of large scale renewable projects in the contracted renewable space: Texas (488 MW, wind)<sup>1</sup>, California (20 MW, solar), Nevada (50 MW, solar) and Utah (20 MW, solar)

<sup>1</sup> Includes recent purchase of 75% interest in 302 MW Santa Rita East Wind Project currently under construction in west of San Angelo, Texas | <sup>2</sup>Includes 6 MW of Auwahi battery storage | <sup>3</sup> Excludes AEP OnSite Partners Note: MWs in map reflect net capacity



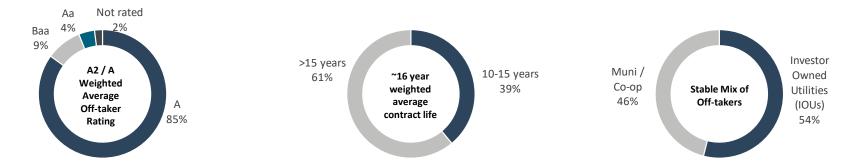
	Transaction Overview
Operating Portfolio	<ul> <li>724 net MW operating wind portfolio across seven states (CO, HI, IN, KS, MI, MN, PA)<sup>1</sup></li> <li>Five of seven wind assets owned 50 / 50 with BP Wind Energy</li> <li>Long-term PPAs with A/A2-rated<sup>2</sup> counterparties &amp; 16 years remaining life<sup>3</sup></li> <li>21% of PPAs with AEP Ohio, SWEPCO, and Indiana Michigan Power</li> </ul>
Transaction Value	<ul> <li>\$1.05B enterprise value including assumption of \$470M of existing project debt &amp; tax equity</li> </ul>
Approvals & Timing	<ul> <li>Closed in April 2019 with approvals from the FERC and Hart-Scott-Rodino clearance</li> </ul>
	Strategic Rationale and Investment Highlights
Expands Contracted Renewables Footprint	<ul> <li>Enhances renewable platform scale and diversity, increasing industry participation in a market we expect to continue to grow</li> <li>The acquisition, in addition to Santa Rita East Wind, increases AEP's contracted large scale renewable generation portfolio by 951 MW<sup>4</sup> to 1,302MW</li> <li>Accelerates and de-risks \$2.2B planned renewable investment commitment through 2023</li> <li>Assets are located in known markets where we already have generation assets or utility operations</li> </ul>
Strong Financial Fit	<ul> <li>Transaction expected to be immediately accretive to EPS in first full year by a few cents</li> <li>Further solidifies our long-term EPS growth guidance of 5% - 7%</li> <li>Tax efficient transaction as our tax appetite allows for monetization of transaction tax attributes, including production tax credits</li> </ul>
Growth Platform	<ul> <li>Development pipeline of the portfolio of up to 1 GW provides potential for incremental growth opportunities</li> </ul>

<sup>1</sup> 724 net MW includes 6 MW battery storage at the Auwahi project | <sup>2</sup> Credit ratings as of 10/8/2018. Maui Electric Company is not rated by Moody's and is rated BBB- by S&P. As such, Maui is shown in the Baa3 category in the pie chart on slide 32 (corresponding Moody's category) for illustrative purposes | <sup>3</sup> Weighted average remaining contract life and asset age as of 12/31/2018 | <sup>4</sup> Includes recent purchase of 75% interest in 302 MW Santa Rita East Wind Project currently under construction in west of San Angelo, Texas

#### Details of Recently Announced Contracted Renewables Transaction



	Asset	MW Net <sup>1</sup>	Off-taker	COD	PPA Expire	Turbine	O&M
	Fowler Ridge 2 (IN)	100		2009	2029	<b>3</b>	Vestas
S	Cedar Creek 2 (CO)	124	<b>2</b> Xcel Energy	2011	2035		Vestas
BP JV Projects	Flat Ridge 2 (KS)	235		2012	2036	<b>88</b>	<b>86</b>
BP JV I	Mehoopany (PA)	70		2012	2032	<u>88</u>	<b>86</b>
	Auwahi (HI)	11	Maui Electric	2012	2032	SIEMENS	SIEMENS
	Total	540					
ned	Black Oak Getty (MN)	78	MMPA	2016	2036	Vestas	Vestas.
100% Owned	Apple Blossom (MI)	100	Consumers Energy	2017	2033	Vestas	Vestas
10	Total	178					
	Overall Total	718 <sup>2</sup>			16 yrs <sup>3</sup>		



<sup>1</sup> Reflects AEP's share | <sup>2</sup> Excludes 6 MW of Auwahi battery storage | <sup>3</sup> Based on weighted average contract life

## **POSITIONING FOR THE FUTURE**

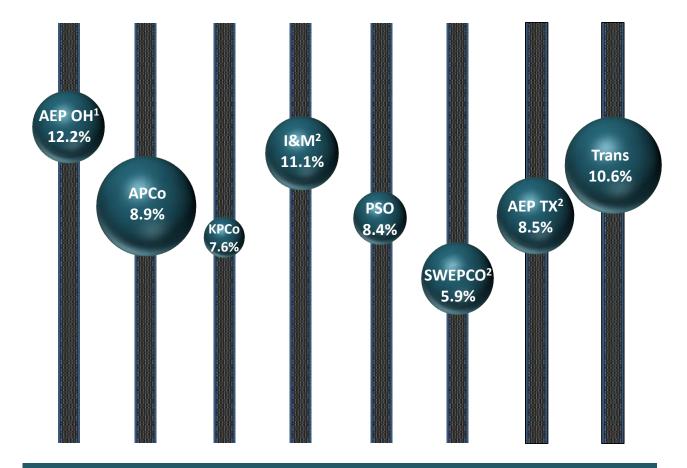
20

## **FINANCIAL INFORMATION**

#### **Regulated Returns**

Twelve Months Ended 6/30/2019 Earned ROE's (non-GAAP operating earnings, not weather normalized)





#### **Regulated Operations ROE of 9.7%** *as of June 30, 2019*

<sup>1</sup> Adjusted to reflect ROE after roll-off of legacy items | <sup>2</sup> Current base rate cases

Sphere size based on each company's relative equity balance

#### **Current Rate Case Activity**



#### **AEP Texas**

Docket #: Filing Date: Requested Rate Base: Requested ROE: Cap Structure: Revenue Increase: Test Year:

Procedural Schedule: Staff Filing Rebuttal Testimony Hearing Expected Effective Date 49494 05/01/2019 \$5.0B 10.5% 55%D / 45%E \$35M 12/31/2018

08/01/2019 08/13/2019 08/20/2019 First quarter 2020



#### I&M – Indiana

Docket #:	45235
Filing Date:	05/14/2019
Requested Rate Base:	\$4.9B
Requested ROE:	10.5%
Cap Structure:	53.2%D / 46.8%E
Gross Revenue Increase:	\$172M
	(Less \$78M D&A)
Net Revenue Increase:	\$94M
Test Year:	2020 Forecasted
Procedural Schedule:	
Intervenor Testimony	08/20/2019
Rebuttal Testimony	09/17/2019
Hearing	10/07/2019
Expected Effective Date	March 2020





### I&M – Michigan

Docket #:	U-20359
Filing Date:	06/24/2019
Requested Rate Base:	\$1.2B
Requested ROE:	10.5%
Cap Structure:	53.6%D / 46.4%E
Gross Revenue Increase:	\$58M
	(Less \$6M D&A)
Net Revenue Increase:	\$52M
Test Year:	2020 Forecasted
Procedural Schedule:	
Staff and Intervenor Testimony	10/17/2019
Rebuttal Testimony	11/12/2019
Hearing	11/21/2019
Expected Commission Order	04/24/2020



### SWEPCO – Arkansas<sup>1</sup>

Docket #:	19-008-U
Filing Date:	02/28/2019
Requested Rate Base:	\$1.2B
Requested ROE:	10.5%
Cap Structure:	49.5%D / 50.5%E
Gross Revenue Increase:	\$46M <sup>2</sup>
	(Less \$12M D&A)
Net Revenue Increase:	\$34M
Test Year:	12/31/2018
Procedural Schedule:	
Rebuttal Testimony	08/20/2019
Hearing	10/21/2019
Expected Effective Date	January 2020

<sup>1</sup> This filing provides SWEPCO's notice of election to move to an annual formula rate review mechanism

<sup>2</sup> Does not include \$29M of current riders moving to base or \$12M for the requested Distribution Reliability Rider



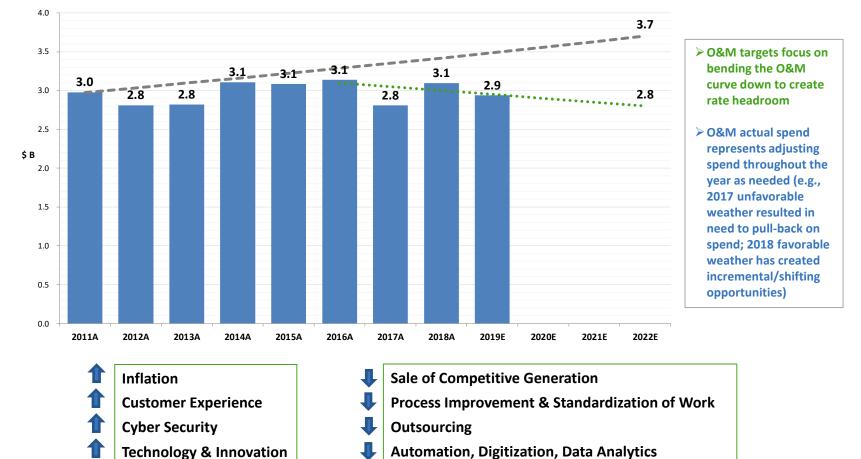
## Bending the O&M Curve While Achieving Our Strategic Goals



Actuals / 2019 Plan

-- Inflation @ 2%

···· Bending the Curve Trajectory



Our initiatives will help reduce the cost of the current ~4,000+ employees retiring or leaving over the next 5 years, thereby reducing O&M and allowing us to focus on more value added activities for our customers

Strategic Sourcing

# Bending the O&M Curve (Initiatives)



### AEP Transmission Spacer Replacement Capital Program

- The replacement program avoids approximately \$80M in O&M expenditures over time
  - ~150k spacers that are near or at end of life will be replaced as part of a capital program on nearly 1800 miles of 765kV lines over the next 10 years



# AEP Station Check In/Check Out Application

- The first true mobile application of its kind saves valuable time for field technicians and dispatchers by eliminating nearly 90% of calls into the TDC from field staff entering or exiting secure facilities
- On average since implementation ~\$500K in labor savings on this activity have been realized

The Co.	A-12 -5, 10 - 14	Krasti Di	Ba120 - 4	12 11	
Phaneline .	9 8	(i (nime) (nime) (i/)	3+1	2	1 1
MICHAECEN	0 0 1	1 11		1	1 B
CAN sub-development	0 8 1	118	5 3		4
and the second	0 0 1	51	•		1 1
d passes		1 DOWNERS	00	_	
N		a sprander of			
		C C A F	1	-	
5 5	8	3	-	10000	10.00
lise and a second s		1 2 4	14.7	10. 8 10.0	
C K K K K	के के के के कि 1 जिस	Ph -	-09 [94	2 salare	
a block of	o Pillatan		- E Mixis	-	_
and the second second	0.01000001		a diama		
1.111	11 11L	1111	1	111	1
	TV- 65		-0	-	6
http://www.ch	and the second	and a second second	10	1.	14-
		E 20	sile.	2	1
Galsen st / K	and a statement	and the second second		-	- second -
and the second se	1 · · · · · · · · · · · · · · · · · · ·	E 14	interior.	and the local division of the local division	1 11
20000 11 5 2		Long and	Maid	-	41 3
	Kanada	and the second se	1 12	50	10
100	and the second se			· · · · · · · · · · · · · · · · · · ·	A REAL PROPERTY AND A REAL PROPERTY.

#### **AEP Asset Health Centers**

- Analytical software platform and fleet-wide asset monitoring device that provides instantaneous data through a robust communications infrastructure
- Real-time data helps in making data-driven operating decisions. Improves safety, reduces unplanned equipment outages, helps in planning and optimizing maintenance, and prioritizes renewal decisions about the condition of assets
- In use since 2014, AHC has provided performance data on equipment that has allowed Transmission to avoid \$36M and Generation over \$25M in costs related to equipment failure



### **Charge Initiative**

~\$200M in digital and process-enabled savings over five years through O&M reductions/cost avoidance (50%), Capital Reduction/Efficiency (25%), Revenues (10%) & Operational Efficiency (15%)

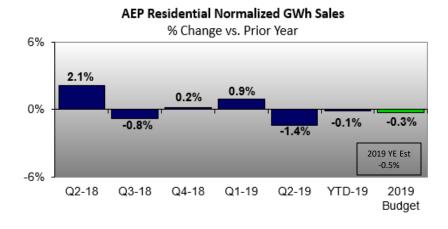
- Distribution/Transmission Field Time Reporting App Mobile app/web that enables contractors to enter time digitally rather than through paper timesheets. Improves efficiency and reduces rework (e.g., audits and audit outcomes).
- Contract Digitization Digital tools & associated analytics that reduce administrative, repetitive work performed by the contract support function.
- Digitized Inspections Combined use of drones, sensors, and digital user tools to minimize the physical labor associated with distribution, transmission, and generation inspections.
- Transmission Capital Commissioning Checklist Mobile app/web that enables employees and contractors to perform and complete commissioning tasks using handheld technology rather than through a paper process. Improves accuracy, increases operational efficiency, reduces rework, and accelerates time to place projects in service.

### **Other Initiatives**

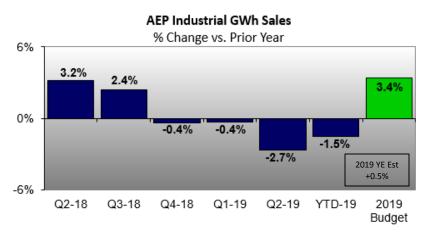
- Strategic Work and Workforce Planning
- Outsourcing Activities
- Tactical Sourcing through Procurement Management

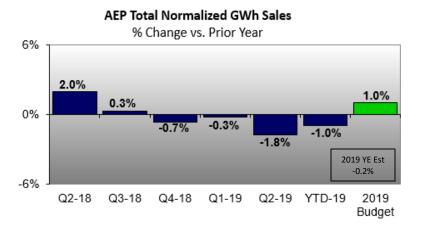
## Normalized Load Trends









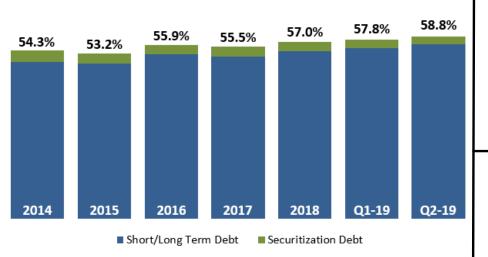


Load figures are provided on a billed basis. Charts reflect connected load and exclude firm wholesale load.

Historical and 2019 data adjusted to reflect reclass of industrial and commercial industry codes for certain customers; no revenue or earnings impact.

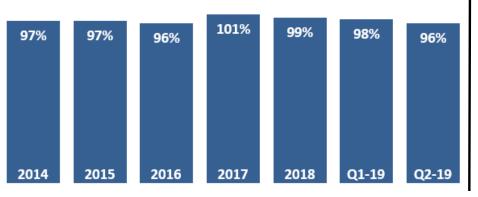
## **Capitalization and Liquidity**





### Total Debt / Total Capitalization

### **Qualified Pension Funding**



### **Credit Statistics**

	Actual	Target
FFO to Total Debt	15.3%	Mid Teens

Represents the trailing 12 months as of 6/30/2019

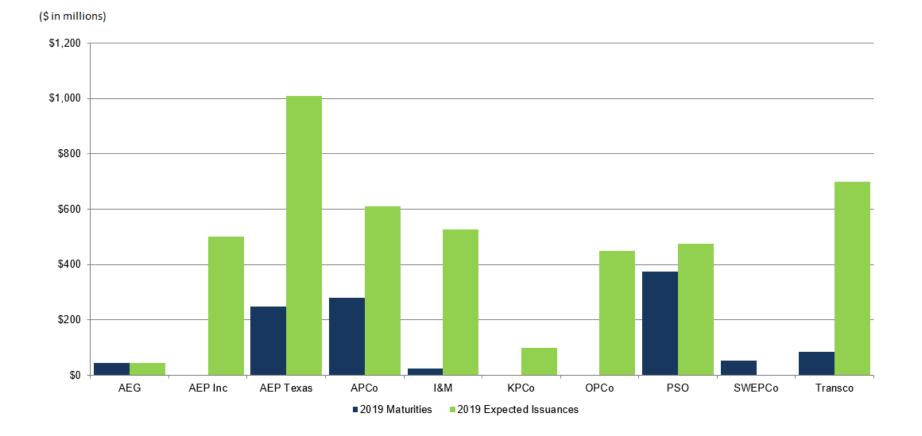
### **Liquidity Summary**

(unaudited)	6/30/2019 Actual		
\$ in millions	Amount	Maturity	
Revolving Credit Facility	\$4,000	Jun-22	
Plus			
Cash and Cash Equivalents	211		
Less			
Commercial Paper Outstanding	(1,585)		
Letters of Credit Issued	-		
Net Available Liquidity	\$2,626		

Strong balance sheet, credit metrics and liquidity

## 2019 Debt Issuance and Maturities Overview





Financing plans are subject to change depending on capital expenditures, regulatory outcomes, internal cash generation, market conditions and other factors



(\$ in millions)						
Year	2019	2020	2021	2022	2023	2024
AEP, Inc.	\$0.0	\$500.0	\$400.0	\$1,105.0	\$0.0	\$0.0
AEP Generating Company	\$45.0	\$150.0	\$0.0	\$0.0	\$0.0	\$0.0
AEP Texas*	\$0.0	\$110.6	\$0.0	\$625.0	\$125.0	\$0.0
AEP Transmission Company	\$85.0	\$0.0	\$50.0	\$104.0	\$60.0	\$95.0
Appalachian Power*	\$0.0	\$65.4	\$367.5	\$329.4	\$0.0	\$86.0
Indiana Michigan Power	\$26.8	\$3.9	\$308.5	\$66.3	\$312.7	\$0.0
Kentucky Power	\$0.0	\$65.0	\$40.0	\$75.0	\$0.0	\$65.0
Ohio Power*	\$0.0	\$0.0	\$500.0	\$0.0	\$0.0	\$0.0
Public Service of Oklahoma	\$125.0	\$12.7	\$250.0	\$0.0	\$0.0	\$0.0
Southwestern Electric Power	\$0.0	\$115.0	\$0.0	\$275.0	\$0.0	\$25.0
Wheeling Power Company	\$0.0	\$0.0	\$0.0	\$178.0	\$0.0	\$0.0
Total	\$282	\$1,023	\$1,916	\$2,758	\$498	\$271

\* Excludes securitization bonds

Includes mandatory tenders (put bonds) Data as of June 30, 2019

Company	Mood Senior Unsecured	y's Outlook	S&I Senior Unsecured	P Outlook
American Electric Power Company Inc.	Baa1	S	BBB+	S
AEP, Inc. Short Term Rating	P2	S	A2	S
AEP Texas Inc.	Baa1	S	A-	S
AEP Transmission Company, LLC <sup>1</sup>	A2	S	A-	S
Appalachian Power Company <sup>2</sup>	Baa1	S	A-	S
Indiana Michigan Power Company <sup>2</sup>	A3	S	A-	S
Kentucky Power Company	Baa3	S	A-	S
Ohio Power Company	A2	S	A-	S
Public Service Company of Oklahoma	A3	S	A-	S
Southwestern Electric Power Company	Baa2	S	A-	S
Transource Energy <sup>3</sup>	A2	S	NR	NR

<sup>1</sup> AEP Transmission Co. received a senior unsecured debt rating of A- from Fitch. The rating outlook is Stable.

<sup>2</sup> In conjunction with the unenhanced VRDN remarketings, APCo and I&M both received short term credit ratings of A-2/P2 from S&P and Moody's, respectively.

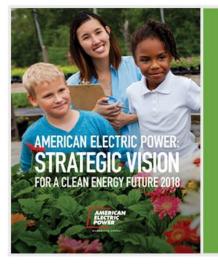
<sup>3</sup> NR stands for Not Rated.

Ratings current as of June 30, 2019

# SUSTAINABLE FUTURE

## **Emission Reduction Goals**





### AEP's CO<sub>2</sub> Emission Reduction Goals

LONG-TERM GOAL:

60% reduction from 2000 CO<sub>2</sub> emission levels by 2030

INTERMEDIATE GOAL:

80% reduction from 2000 CO<sub>2</sub> emission levels by 2050

#### **Strategy to Achieve:**

- Investments in renewable energy within and outside of our traditional service territory
- **Technology deployment (e.g., energy storage)**
- Modernization of the grid with significant investments in transmission & distribution
- Increased use of natural gas
- **Optimization of our existing generating fleet**

# Environmental, Social & Governance (ESG) Reporting:

- AEP's Corporate Accountability Report
- Clean Energy Strategy: American Electric Power: Strategic Vision for a Clean Energy Future
- EEI ESG Sustainability Reporting: AEP's 2019 EEI ESG Report
- > AEP's CDP Survey Responses
- > AEP's GRI Report
- AEP also responds to investorrelated surveys, including MSCI and Sustainalytics

## **Transforming Our Generation Fleet**





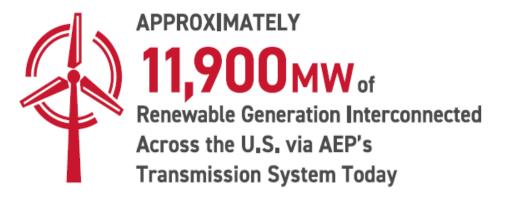
As of 08/01/2019. Future includes IRP forecasted additions and retirements through 2030. Energy Efficiency / Demand Response represents avoided capacity rather than physical assets.

## **Delivering Clean Energy Resources**



#### AEP's August 1, 2019 Renewable Portfolio, in MW

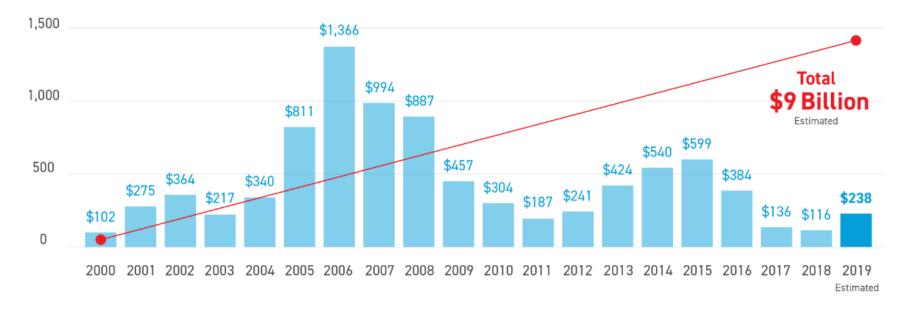
Hydro, Wind, Solar & Pumped Storage	Owned MW	PPA MW	Total MW
AEP Ohio		209	209
Appalachian Power Company	785	575	1,360
Indiana Michigan Power Company	36	450	486
Public Service Company of Oklahoma		1,137	1,137
Southwestern Electric Power Company		469	469
Competitive Wind, Solar & Hydro	1,437	175	1,612
Total	2,258	3,015	5,273







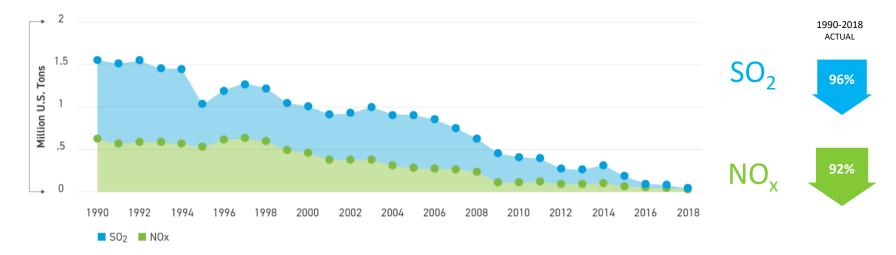
## **INVESTMENT IN ENVIRONMENTAL CONTROLS \$** in millions



## **Dramatic Reductions in Emissions**



### **TOTAL AEP SYSTEM NOx & SO<sub>2</sub> EMISSIONS**

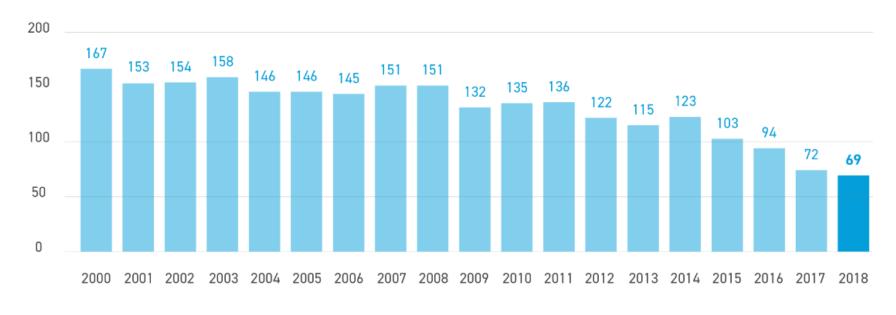


### TOTAL AEP SYSTEM MERCURY EMISSIONS





## TOTAL AEP SYSTEM - ANNUAL CO2 EMISSIONS in million metric tons



2000-2018 Actual











The Premier Regulated Energy Company



## Positioned to Deliver Superior Risk Adjusted Returns