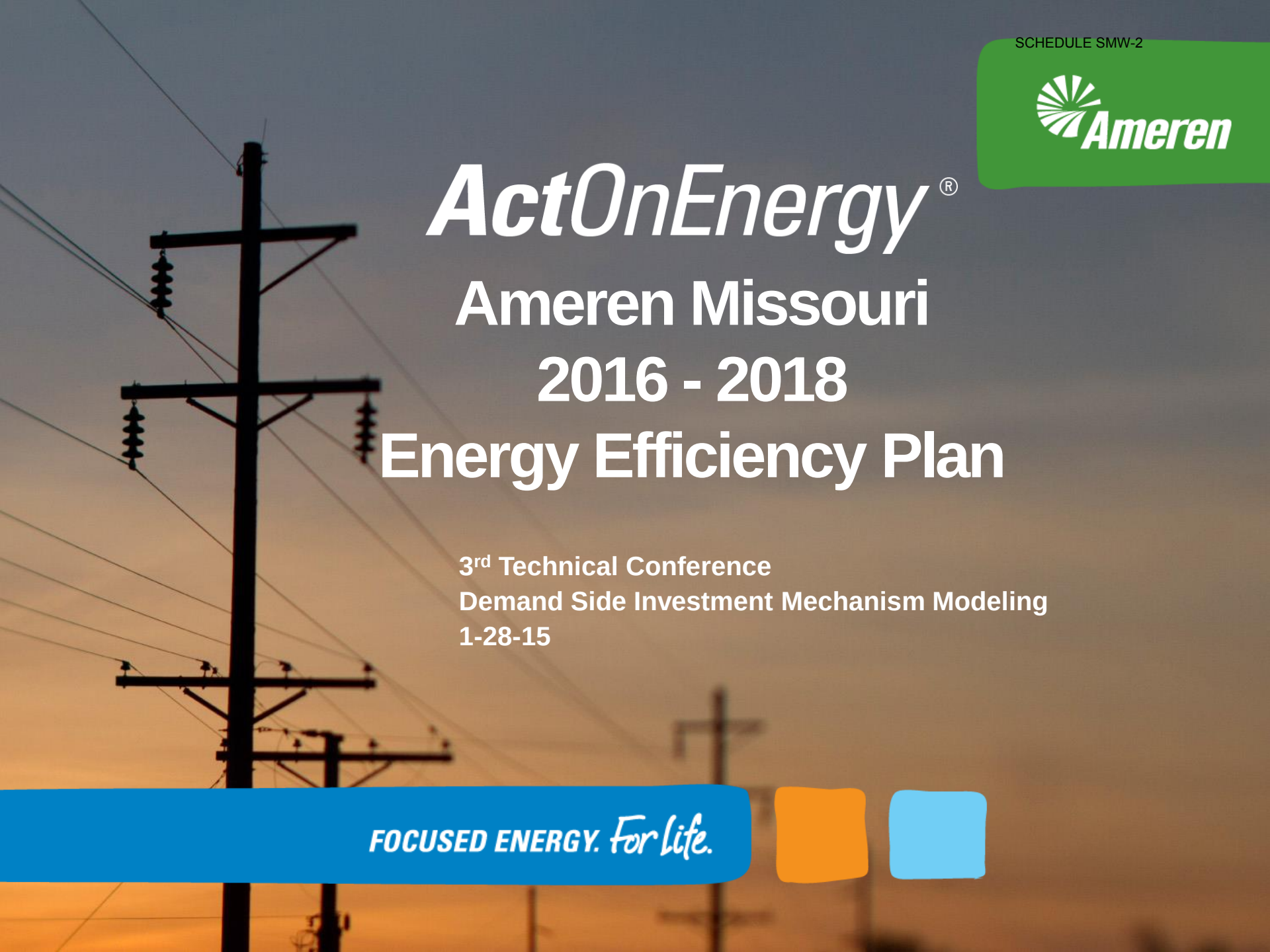
SCHEDULE SMW-2



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Ameren Missouri
2016 - 2018
Energy Efficiency Plan

3rd Technical Conference
Demand Side Investment Mechanism Modeling
1-28-15

FOCUSED ENERGY. For life.

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Agenda

- Welcome and Introductions –Dan Laurent
- Business EE Program Continuity Update - Rich Wright
- Demand Side Investment Mechanism – Steve Wills
  - Cost Recovery
  - Throughput Disincentive (TD-NSB)
    - Conceptual Overview
    - Marginal Rate Analysis
    - Future Rate Case Modeling
  - Performance Incentive
    - IRP Analysis
    - Benchmarking
- Future Technical Conferences – Dan Laurent

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Cost Recovery

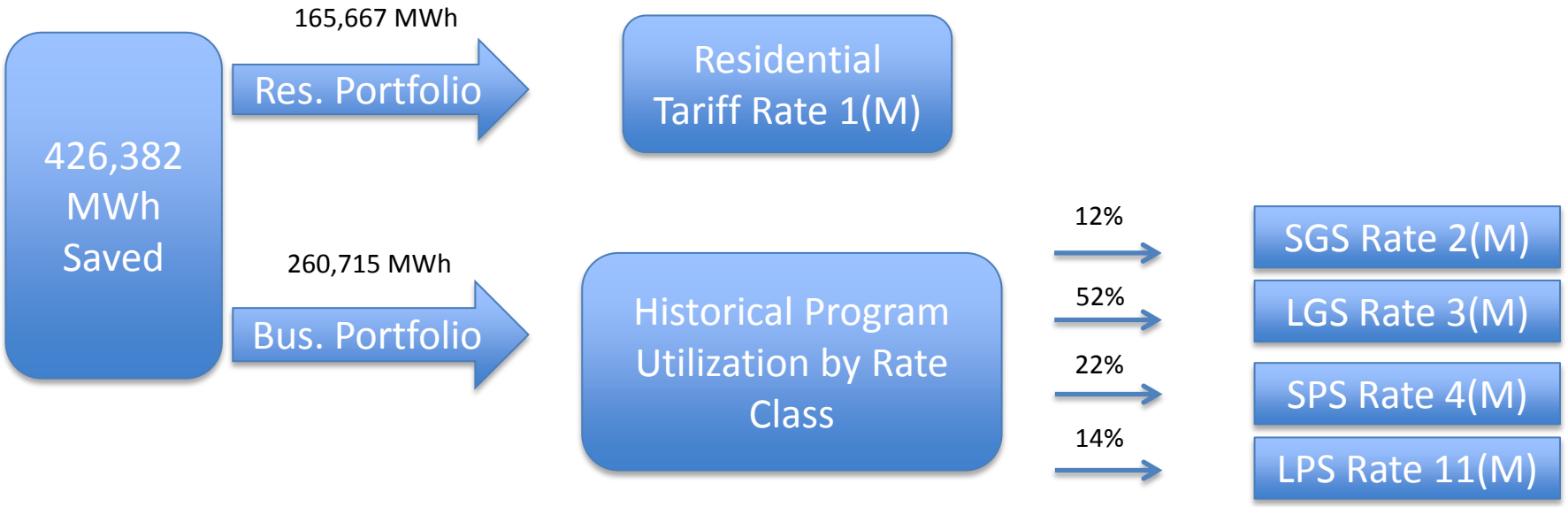
- Program costs recovered dollar for dollar through Rider EEIC 1618
  - Forecast costs for coming year
  - Include forecasted cost in determination of rate for Rider EEIC 1618
  - True-up actual program costs incurred to program costs billed under the rider and incorporate over- or under-recoveries in subsequent Rider filing including short-term interest expense

Throughput Disincentive - Conceptual Overview

- The throughput disincentive arises from the fact that a majority of the fixed costs of the Company's system are collected through variable charges
- Decreases in usage impact revenues without reducing the fixed costs incurred
- The recovery of the cost of equity capital is based on the remaining revenues that are available after all of the other costs and taxes are paid – so losing revenue on the margin causes earnings erosion
- The immediate impact of energy savings on utility earnings acts as a disincentive to promoting energy efficiency
  - MEEIA legislation recognizes this misalignment of incentives

Throughput Disincentive – Marginal Rate Analysis

- When a kWh is saved, how do we quantify the impact on utility earnings?



Throughput Disincentive – Marginal Rate Analysis

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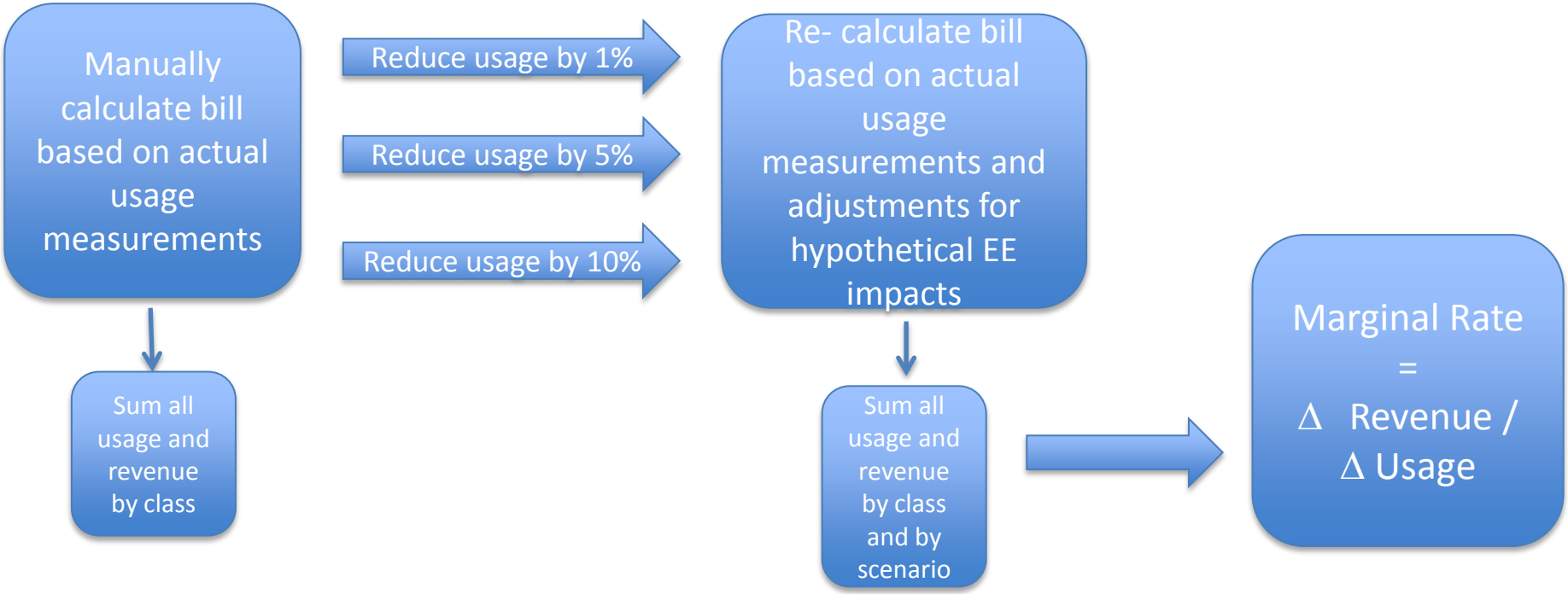
- All applicable rates [1(M), 2(M), 3(M), 4(M), 11(M)] have some complex structures – meaning not every kWh is priced equally
  - Marginal rate impact study
- Downloaded all bills for the 12 month period ended March 2014



Sample Bill Calculation – Residential Non-Summer Bill

	Usage (kWh)	Block 1 Usage	Block 1 Rate	Block 1 Revenue	Block 2 Usage	Block 2 Rate	Block 2 Revenue	Total Revenue	Δ Revenue	Δ Sales	Average Rate	Marginal Rate
Original Bill	800	750	$0.0808	$60.60	50	$0.0538	$2.69	$63.29			$0.0791	
1% EE Impact	792	750	$0.0808	$60.60	42	$0.0538	$2.26	$62.86	-$0.43	-8	$0.0794	$0.0538
5% EE Impact	760	750	$0.0808	$60.60	10	$0.0538	$0.54	$61.14	-$2.15	-40	$0.0804	$0.0538
10% EE Impact	720	720	$0.0808	$58.18	0	$0.0538	$0.00	$58.18	-$5.11	-80	$0.0808	$0.0639

Residential Billing Analysis for 12 Months Ended March 2014

	Actual Bills			1% Energy Reduction Case			
	Class Usage (MWh)	Class Revenue ($MM)	Average Rate	Change in Usage (MWh)	Change in Revenue ($MM)	Marginal Rate	Marginal Rate vs Average Rate
Summer	4,662,650	$530	$0.114	-46,589	-$5.3	$0.114	100%
Non-Summer	9,325,760	$634	$0.068	-93,250	-$5.5	$0.059	86%
Annual	13,988,410	$1,164	$0.083	-139,839	-$10.8	$0.077	93%

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Demand Charges

- Some revenues are collected based on billing demand
- Billing demand is impacted by EE also
- Demand impact may be different from energy usage impact for various EE measures, depending on the end use characteristics
- Change in billing demand was calculated using 2013 deemed energy vs. demand savings results in conjunction with class load research

	Class Energy (kWh)	Coincident Peak Demand (kW)	Load Factor	Demand Impact vs. Energy Impact
LPS 11(M) Load Research for 2013	4,148,055,142	599,715	78.96%	
Deemed 2013 Savings	6,156,424	1,163	60.42%	
Class load after EE	4,141,898,718	598,552	78.99%	
% EE Reduction	0.15%	0.19%		130.68%

Marginal Rate Study: Results

- Demand vs. Energy impact differences can produce marginal rate higher than the average rate
- Unique feature of SGS rate design (dynamic rate block) pushes marginal rate above average rate

Marginal Rate as a % of Average Rate			
Class	**Summer**	**Winter**	**Annual**
RES	100.0%	86.3%	92.5%
SGS	100.0%	103.3%	101.8%
LGS	95.3%	96.4%	95.9%
SPS	103.9%	102.8%	103.3%
LPS	105.7%	100.7%	103.0%

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Variable Costs

- The marginal rate study assesses the impact of EE on total revenues – a portion of which collect variable costs
- The variable costs being collected in rates are identified in the Fuel Adjustment Clause Tariff term BF (Base Factor)
- BF indicates the level of net energy costs that are embedded in permanent rates on a per kWh basis (including kWh of line losses)
- Earnings impact of EE is the revenue erosion based on marginal rate, less the loss adjusted rate BF
- Throughput Disincentive Model also picks up incremental Off-System Sales revenues made possible by EE and credits the 5% share of the incremental revenues retained by the Company through the FAC against the margin erosion

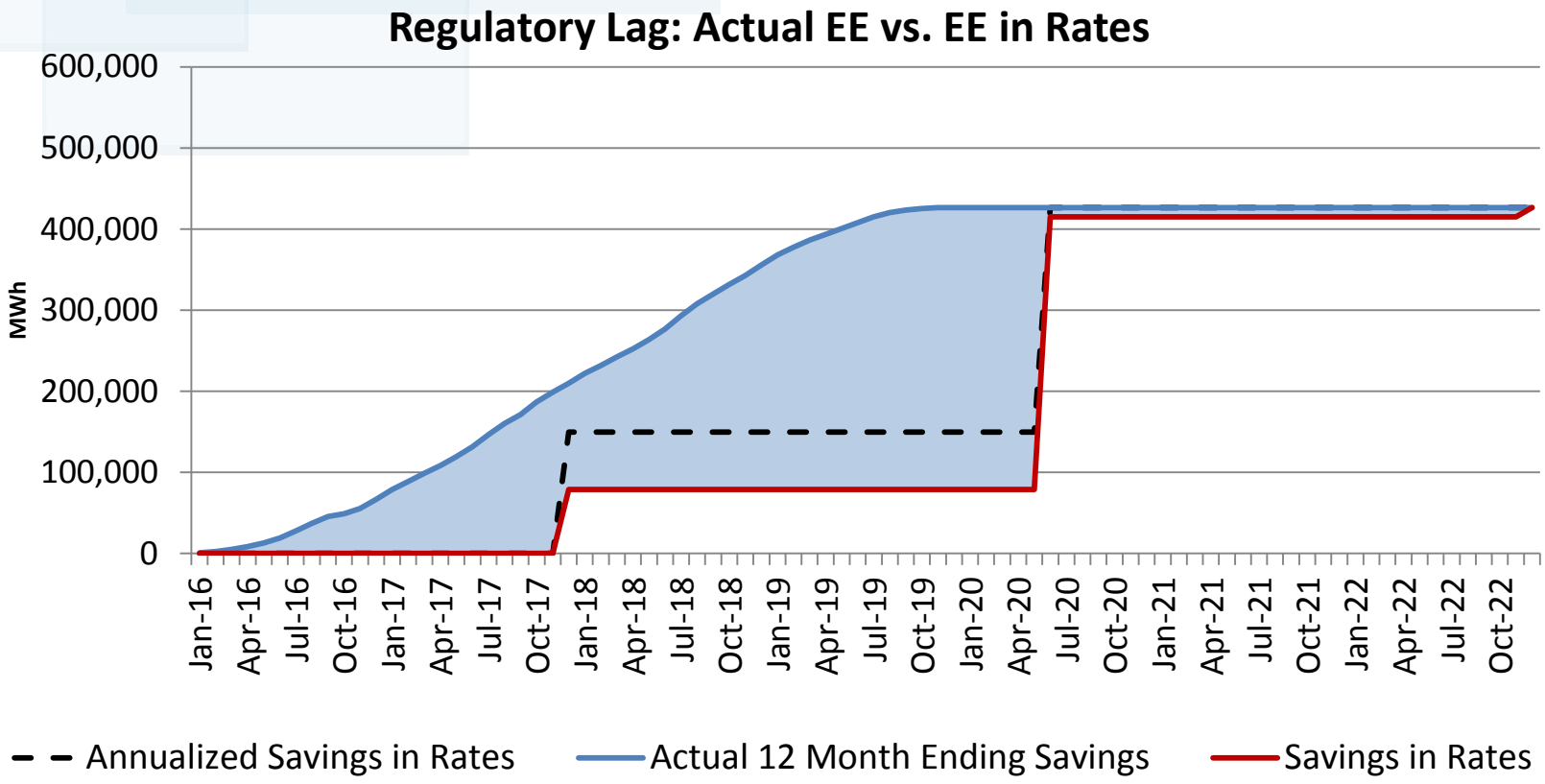
Throughput Disincentive: Future Rate Case Modeling

- Rate cases assumed to occur every 30 months
- Margin rate increase assumed to be 5.5% (as filed) in ER-2014-0258 and 4% in future rate cases (assumes approximately 1.5% per year cost increases and 30 months of increase)
- Test year and update period relationship to date of new rates consistent with recent cases
- EE savings annualized in test year update period in all rate cases with MEEIA 2016-18 impacts
  - This was done for pre-MEEIA EE savings in case ER-2012-0166

Test Year Annualization Illustration from 2012 Rate Case

Illustrative Actual and Annualized Test Year kWh for CFL Installed in July 2011						
Test-Year Month	Annualized kWh Savings	Monthly Usage Pattern	Monthly Savings (kWh)	Measure Installed in Test Year?	Actual Savings (kWh)	Annualization Adjustment (kWh)
10/01/2010		8.4%	2.77	No	0	
11/01/2010		9.3%	3.06	No	0	
12/01/2010		10.0%	3.28	No	0	
01/01/2011		10.4%	3.43	No	0	
02/01/2011		9.3%	3.07	No	0	
03/01/2011		9.0%	2.95	No	0	
04/01/2011		8.2%	2.68	No	0	
05/01/2011		7.6%	2.5	No	0	
06/01/2011		6.7%	2.2	No	0	
07/01/2011		6.6%	2.16	Half-Month	1.08	
08/01/2011		7.1%	2.32	Yes	2.32	
09/01/2011		7.4%	2.43	Yes	2.43	
Total	32.85	100.0%	32.85		5.83	-27.02

Throughput Disincentive Illustration



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TD-NSB Share

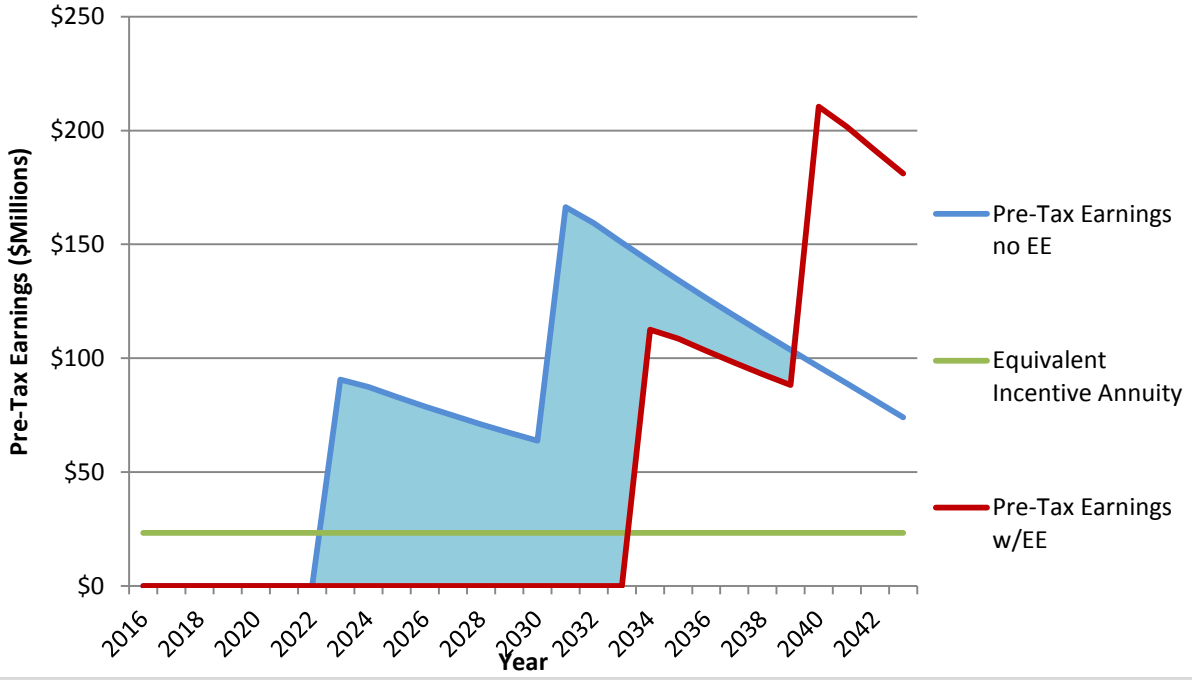
- Based on the aforementioned assumptions, the 2016 NPV of the throughput disincentive impact on pre-tax earnings is $44 million
- The total 2016 NPV of net benefits of the plan are $135.1 million
- TD-NSB Share = $44 / $135.1 = 32.57%
- The source of the $44 million in throughput disincentive is customer savings on the fixed cost portion of bills
  - The reduction in customer bills benefits customers
  - These benefits are not reflected in the avoided costs used to assess cost effectiveness (TRC, UCT)
    - To truly assess the customer impact of the TD-NSB, the fixed cost bill savings need to be considered along with the TD-NSB payments they will make
  - Participants recognize the fixed cost bill savings; all customers (excluding opt-out) pay TD-NSB
    - All customers have the opportunity to be participants

Financial Performance Incentive: IRP Analysis

- Grounded in MEEIA law/rule requirement to encourage utility decision makers value supply side and demand side resources equally
  - 2014 IRP
    - Without energy efficiency, additional supply side resources would be needed earlier in the planning period
      - Combined Cycle plants in 2023, 2031, and 2034 (in addition to renewable additions)
    - With energy efficiency, supply side resources as identified in the preferred plan
      - Combined Cycle plant in 2034 (in addition to renewable additions)
  - Earnings on the capital investment associated with the 2023 and 2031 combined cycles are opportunity cost to the utility making EE investments

Financial Performance Incentive: IRP Analysis

- Differential in future utility earnings with and without EE depicted below
- NPV of the green line equals the difference in NPVs of the blue and red line
- Annuity of $23 million



Financial Performance Incentive: Benchmarks

% of Goal Achieved	70	100	130
Incentive per Program Year	$5.3	$8.3	$13.3
3-Year Total Incentive	$16.0	$25.0	$40.0
2016 NPV of Incentive	$12.1	$18.9	$30.2
% of Net Benefits	12.8%	14.0%	17.2%
% of Program Costs	9.6%	15.0%	23.9%
$/kWh Achieved Incentive	$0.054	$0.059	$0.072
ROE Basis Points	9	14	23

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Technical Conferences

- *1st Technical Conference – 1/16/15 Filing Overview*
- *2nd Technical Conference – 1/22/15 - EE Potential Study and IRP DSM Portfolio Selection*
- **3rd Technical Conference**
  - Wednesday, January 28 at 1:00 pm
  - Topics: Business Program Continuity & Demand Side Investment Mechanism
- **4th Technical Conference**
  - Wednesday, February 4 at 3:00 pm
  - Topics: Multi-Family and Future New Programs
- **5th Technical Conference**
  - Wednesday, February 18 at 10:30 am
  - Topics?
- **6th Technical Conference**
  - Wednesday February 25 at 2:00 pm

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List of Acronyms Used

- MEEIA – Missouri Energy Efficiency Investment Act
- DSIM – Demand Side Investment Mechanism
- NTG – Net to Gross
- TRM – Technical Resource Manual
- NPV – Net Present Value
- EM&V – Evaluation, Measurement, & Verification
- EEIC – Energy Efficiency Investment Charge
- RAP – Realistic Achievable Potential
- TRC – Total Resource Cost
- UCT – Utility Cost Test
- IRP – Integrated Resource Plan
- TDNSB – Throughput Disincentive Net Shared Benefits
- PINSB – Performance Incentive Net Shared Benefits
- MW - Megawatt
- MWH – Megawatt-Hour
- C&I – Commercial and Industrial
- EE – Energy Efficiency
- DSM – Demand Side Management

RES - Residential
SGS – Small General Service
LGS – Large General Service
SPS – Small Primary Service
LPS – Large Primary Service