# AEP Ohio
# CRES Provider Workshop

October 1, 2014

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# Agenda

- Welcome
- Opening Remarks
- Regulatory Update – ESP III / Auction Status
- Net Metering
- Load Profiles
- Transmission/PJM
- Write-offs
- Welcome Customer Services & Marketing
- AEPCH Operations & Projects
- AEP Ohio gridSMART®
- Reinstatements
- Billing Validations & Budget
- Q & A
- Wrap-up

# AEP Ohio Choice Operations

- Face of AEP Ohio to CRES Providers
- Address CRES Inquiries via ohiochoiceoperation@aep.com
- Interact with AEP Departments
- Strategic Initiatives & PUCO Working Groups

# AEP Ohio Choice Operations Team

- Michele Chavalia – Manager
- Anita Adams – Market Specialist
- Amanda Butler – Market Specialist
- Kristine Watts – Market Specialist
- Kevin Vass – Market Account Manager
- Open – Provider Support Associate

# Workshop Survey

- CRES Provider Input
- Complete after each Topic
- Additional Comments
- Leave Survey on Table

# Questions?

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# Opening Remarks

Gary Spitznogle

October 1, 2014

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# Regulatory Update: Auction Status ESP II /ESP III as Proposed

Andrea Moore

October 1, 2014

# Auction Schedule ESP II

Auction Schedule (Energy Only Auction Results Reflected in APIR)

- 25% Auction May Flow Beginning November 1, 2014
- 25% Auction September Flow Beginning November 1, 2014
- 40% Auction November Flow Beginning January 1, 2015

# Summary of Market Transition G Rates

- ESP II Transition Timeline

| | ESP II | | | | ESP III |
|---|---|---|---|---|---|
| | 1/1/2014 to 3/31/2014 | 4/1/2014 to 10/31/2014 | 11/1/2014 to 12/31/2014 | 1/1/2015 to 5/31/2015 | 6/1/2015 |
| **Auctions** | | | | | |
| Energy Auction % | 0% | 10% | 60% | 100% | 100% |
| Ohio part of AEP's FRR Election | Yes | Yes | Yes | Yes | No |
| Capacity in Auction | -- | No | No | No | Yes |
| Ancillary Services in Auction | -- | No | No | No | Yes |
| **Base Generation Rates** | | | | | |
| Base Generation Rates | 100% | 90% | 40% | 0% | -- |
| Base Generation/Capacity at $188.88 / MW-Day | 0% | 10% | 60% | 100% | -- |

# Overview of ESP III

- ESP Term - June 1, 2015 through May 31, 2018
- Completes the Commission's objective of full transition to market
- Supports needed distribution infrastructure investment for continued and increased reliability
- Provides customers, auction participants, and CRES providers with advanced knowledge of the AEP Ohio Marketplace through May 2018
- Auctions- mix of two supply periods, 12 months and 24 months
  - Two auctions per year
  - Each synchronized to PJM planning year

| | Delivery Periods | | |
|---|---|---|---|
| Auction Date | June 2015 | June 2016 | June 2017 |
| September 2014 | 12 Month June 2015-May 2016 33%<br>24 Month June 2015- May 2017 17% | | |
| March 2015 | 12 Month June 2015-May 2016 33%<br>24 Month June 2015- May2017 17% | | |
| September 2015 | | 12 Month June 2016-May 2017 33% | |
| March 2016 | | 12 Month June 2016-May 2017 33% | |
| September 2016 | | | 12 Month June 2017-May2018 50% |
| March 2017 | | | 12 Month June 2017-May2018 50% |

# Impact on Customer Rates

- On average over the three-year period, SSO customers are expected to see an approximate decrease in rates of 9%, shopping customers are expected to see rates remain flat.
- SSO rate will be determined based on a competitive bid auction
  - Will result in a bundled price for capacity, energy, and market-based transmission

**SSO Customers**

| | ESP II Current Rates & Known Changes | ESP III | | |
|---|---|---|---|---|
| | Nov 2012 - Oct 2013 $/MWh | June 2015 - May 2016 $/MWh | June 2016 - May 2017 $/MWh | June 2017 - May 2018 $/MWh |
| Base G / Generation Capacity | 25.28 | 12.12 | 5.39 | 8.74 |
| FAC / Generation Energy | 38.42 | 41.4 | 43.68 | 42.54 |
| **Total Generation** | 63.70 | 53.52 | 49.07 | 51.28 |
| Riders | 47.57 | 48.74 | 49.59 | 50.33 |
| Total $ /MWh | 111.27 | 102.26 | 98.66 | 101.61 |
| % Change over Current | | -8% | -11% | -9% |

**Shopping Customers**

| | ESP II Estimated Rates | ESP III | | |
|---|---|---|---|---|
| | Jan 2015 - May 2015 $/MWh | June 2015 - May 2016 $/MWh | June 2016 - May 2017 $/MWh | June 2017 - May 2018 $/MWh |
| Market G Capacity | 11.41 | 12.12 | 5.39 | 8.74 |
| Market G Energy | 42.54 | 42.54 | 42.54 | 42.54 |
| **Total Generation** | 53.95 | 54.66 | 47.93 | 51.28 |
| Riders | 47.57 | 48.69 | 49.54 | 50.28 |
| Total $ /MWh | 101.52 | 103.35 | 97.47 | 101.56 |
| % Change over Current | | 2% | -4% | 0% |

# Typical Bills- SSO Customer

**Columbus Southern Power Rate Zone**

| | Summer Monthly Bills | | | Winter Monthly Bills | | | |
|---|---|---|---|---|---|---|---|
| **Household** | **Current** | **Proposed** | **Change** | **Current** | **Proposed** | **Change** | **Tariff** |
| 1,000 kWh usage | $156 | $144 | -8% | $143 | $133 | -7% | R-R Bill |
| 2,000 kWh usage | $306 | $281 | -8% | $230 | $232 | 1% | R-R Bill |
| 3,000 kWh usage | $455 | $418 | -8% | $316 | $330 | 4% | R-R Bill |
| 4,000 kWh usage | $604 | $555 | -8% | $402 | $428 | 6% | R-R Bill |
| **Small Business** | | | | | | | |
| 1,000 kW demand and 100,000 kWh usage | $17,749 | $14,238 | -20% | $17,749 | $13,916 | -22% | GS-2 Primary |
| 1,000 kW demand and 300,000 kWh usage | $37,245 | $29,876 | -20% | $37,245 | $28,910 | -22% | GS-3 Primary |
| **Industrial Business** | | | | | | | |
| 20,000 kW demand and 6 million kWh usage | $507,465 | $423,228 | -17% | $507,465 | $404,268 | -20% | GS-4 |
| 20,000 kW demand and 12 million kWh usage | $832,612 | $775,112 | -7% | $832,612 | $737,192 | -11% | GS-4 |

**Ohio Power Rate Zone**

| | Summer Monthly Bills | | | Winter Monthly Bills | | | |
|---|---|---|---|---|---|---|---|
| **Household** | **Current** | **Proposed** | **Change** | **Current** | **Proposed** | **Change** | |
| 1,000 kWh usage | $141 | $137 | -3% | $141 | $133 | -5% | RS Bill |
| 2,000 kWh usage | $265 | $261 | -2% | $265 | $254 | -4% | RS Bill |
| 3,000 kWh usage | $389 | $384 | -1% | $389 | $374 | -4% | RS Bill |
| 4,000 kWh usage | $513 | $507 | -1% | $513 | $494 | -4% | RS Bill |
| **Small Business** | | | | | | | |
| 1,000 kW demand and 100,000 kWh usage | $16,896 | $15,521 | -8% | $16,896 | $15,199 | -10% | GS-2 Primary |
| 1,000 kW demand and 300,000 kWh usage | $35,403 | $30,715 | -13% | $35,403 | $29,749 | -16% | GS-2 Primary |
| **Industrial Business** | | | | | | | |
| 20,000 kW demand and 6 million kWh usage | $584,463 | $443,698 | -24% | $584,463 | $424,738 | -27% | GS-4 Transmission |
| 20,000 kW demand and 12 million kWh usage | $897,602 | $816,035 | -9% | $897,602 | $778,115 | -13% | GS-4 Transmission |

# Recovery Mechanisms

- Proposed New Riders:
  - **gridSMART® Phase II Rider-** Application for Phase II was filed on September 13, 2013 (Docket No. 13-1939-EL-RDR). Includes Advanced Metering Infrastructure, Distribution Automation Circuit Reconfiguration, and Volt/VAR Optimization. Seeking approval for Phase II to become effective January 1, 2014. ESP III will continue this rider.
  - **Auction Cost Reconciliation Rider -** Allows the Company to recover any over/under collection based on what was billed to SSO customers versus what was paid to auction winners as well as all costs associated with Competitive Bid Process.
  - **NERC Compliance and Cybersecurity Rider -** Serves as a placeholder for potential future increases in the cost of compliance.
  - **Sustained and Skilled Workforce Rider -** Recovers the O&M portion of incremental labor costs ***of new jobs created*** to address the projected shortfall of distribution labor resources.
  - **Basic Transmission Cost Rider -**Will recover certain transmission costs to better align with transmission recovery mechanisms of other EDUs in the State.
  - **Generation Energy and Generation Capacity Riders -** Replace base generation and FAC rates.
  - **Power Purchase Agreement Rider-** Provides a hedge against market volatility. Initially includes the net benefit or cost accruing to AEP Ohio from its OVEC entitlement.
  - **Bad Debt Rider-** Proposed due to implementation of a Purchase of Receivables program. Will include incremental bad debt expense since the date certain of the distribution rate case. Late payment charge, specific to residential customers, to be implemented and is revenue neutral. Will be offset by a reduction in Bad Debt Rider.

# Recovery Mechanisms/Schedules

- Proposed Changes to Existing Riders/Mechanisms:
  - **Distribution Investment Rider (DIR) -** Change to include General Plant accounts in rider and roll **gridSMART® Phase I Rider** into DIR.
  - **Storm Damage Cost Recovery Rider (SDRR)-** Based on the Storm Recovery Mechanism approved in ESP II. An annual true up will establish a rider to collect or refund the regulatory asset or liability from the previous year for any major storm cost exceeding or below the $5 million baseline.
- Elimination of Existing Riders/Schedules:
  - **Transmission Cost Recovery Rider (TCRR)-** Subject to final true up. Generation related transmission costs will be included in the auction beginning June 1, 2015, and non-generation related transmission would be recovered in the newly proposed BTCR.
  - **Fuel Adjustment Clause (FAC)-** Replaced by Auction Cost Reconciliation Rider. Subject to final true-up.
  - **Following Schedules are not Relevant to Wires Only Company:**
    - **Schedule Interruptible Power- Discretionary (IRP-D)-** Discount is for generation services
    - **Schedule Supplement 18-** Introduced to give certain church and school service discounts on their demand charges in order to recognize that their typical usage is during off- peak hours.
    - **Schedule Stand-By-Service-** The distribution rates are the same for this schedule as the regular general service schedule.
    - **Time of Use Schedules-** Generation related.

# Recovery Mechanisms

- Continuation of current riders/schedules:
  - Key riders include:
    - Economic Development Rider (EDR)
    - Enhanced Service Reliability Rider (ESRR)
    - Alternative Energy Rider (AER)
    - Energy Efficiency/Peak Demand Reduction Rider (EE/PDR)
    - Pilot Throughput Balancing Adjustment Rider (decoupling)
    - Retail Stability Rider (RSR)- A separate application will be filed to continue this rider
    - Deferred Asset Phase-In (Distribution Deferred Assets securitization)

# Purchase of Receivables Program (POR)

- Agreement between the CRES provider and the Company to purchase allowable receivables billed on behalf of the CRES
- Though not required by an ESP, the Company is offering voluntarily as part of the overall ESP package
- There will be a zero discount rate to the POR if the Bad Debt Rider is approved
- Benefits of offering a POR:
  - POR programs attract more CRES providers
  - Customers can be placed on the Company's Budget and Average Monthly Payment programs
  - Customer deals with one entity for billing
  - Promotes positive shopping experience for customers

# Summary of Riders

| Riders - No Change | Sheet No. | Abbreviation | Rider Type |
|---|---|---|---|
| Economic Development | 482-1 | EDR | Nonbypassable |
| Enhanced Service Reliability | 483-1 | ESRR | Nonbypassable |
| Deferred Asset Phase-In Rider | 465-1 | DAPIR | Nonbypassable |
| Alternative Energy Rider | 492-1 | AER | Bypassable |
| Energy Efficiency/Peak Demand Reduction | 481-1 | EE/PDR | Nonbypassable |
| Retail Stability Rider | 487-1 | RSR | Nonbypassable |
| Universal Service Fund Rider | 460-1 | USF | Nonbypassable |
| kWh Tax Rider | 462-1 | kWh Tax | Nonbypassable |
| Residential Distribution Credit Rider | 463-1 | RDCR | Nonbypassable |
| Pilot Throughput Balancing Adjustment Rider | 464-1 | PTBAR | Nonbypassable |
| Phase-In Recovery Rider | 494-1 | PIRR | Nonbypassable |
| Transmission Under Recovery Rider | 476-1 | TURR | Nonbypassable |

| Riders - Changes Requested | Sheet No. | Abbreviation | Rider Type |
|---|---|---|---|
| Distribution Investment Rider | 489-1 | DIR | Nonbypassable |
| Storm Damage Cost Recovery Mechanism/Rider | 490-1 | SDRR | Nonbypassable |

| Riders - Eliminated | Sheet No. | Abbreviation | Rider Type |
|---|---|---|---|
| gridSMART Rider (Phase I) | | gridSMART® | Nonbypassable |
| Transmission Cost Recovery | | TCRR | Bypassable |
| Fuel Adjustment Clause | | FAC | Bypassable |
| Generation Resource Rider | | GRR | NA |
| Pool Termination Rider | | PTR | NA |
| Base Generation Rates (All Schedules) | | | Bypassable |

| New Proposed Riders | Sheet No. | Abbreviation | Rider Type |
|---|---|---|---|
| gridSMART Rider (Phase II) | 485-1 | gridSMART® | Nonbypassable |
| Sustained and Skilled Workforce | 466-1 | SSWR | Nonbypassable |
| NERC Compliance and Cybersecurity Rider | 472-1 | NCCR | Nonbypassable |
| Bad Debt Rider | 461-1 | BDR | Nonbypassable |

| Riders Replacing Existing Mechanisms | Sheet No. | Abbreviation | Rider Type | Replaces |
|---|---|---|---|---|
| Auction Cost Reconciliation Rider | 469-1 | ACRR | Bypassable | Base Generation and Fuel Adjustment Clause |
| Power Purchase Agreement Rider | 473-1 | PPA | Nonbypassable | |
| Generation Energy | 467-1 | GENE | Bypassable | |
| Generation Capacity | 468-1 | GENC | Bypassable | |
| Basic Transmission Cost Rider | 474-1 | BTCR | Nonbypassable | TCRR |

# Questions?

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# Net Metering

Mark Gundelfinger

October 1, 2014

# Net Metering

# Net Metering Contacts

- Mark Gundelfinger
  - Manager Alternative Energy Resources
  - 614-883-7891
- Mike Grieshop
  - Distributed Generation (DG) Coordinator
  - 614-883-6819

# Questions?

# BREAK!

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# Load Profiles

Karen Lee
Load Research Analyst

October 1, 2014

# Why Load Profiling?

- For most SDIs, all that is known is their monthly energy
- For settlement purposes, hourly usage values are needed
- Historically, interval metering for every SDI was cost prohibitive
- Load Profiling allows all SDIs to easily participate

# How we Load Profile

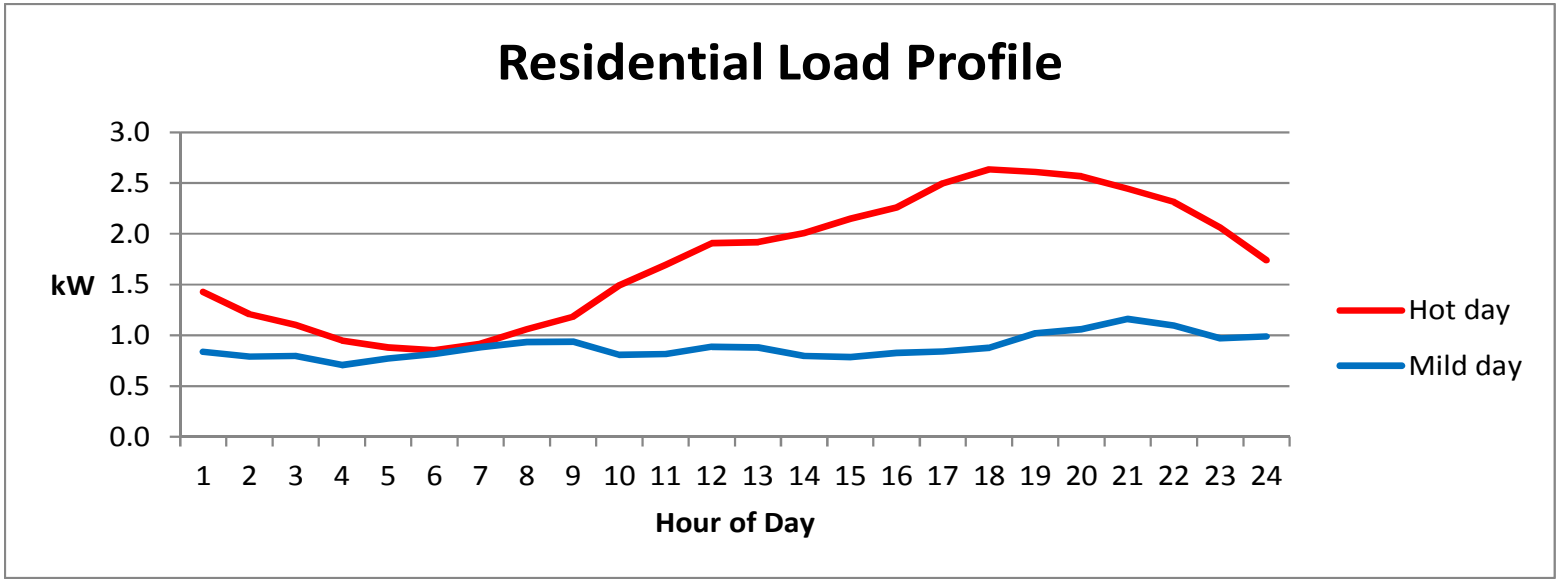
- AEP Ohio has on-going rate class samples, which meet PURPA 90/10 statistical accuracy standards, and which are used for cost-of-service studies
- Load Profiles are based on existing rate classes
  - Residential Service
  - GS1 – General Service Small
  - GS2 – General Service Medium
  - GS3 – General Service Large

# How we Load Profile (cont'd)

- Utilize actual sample data in calculating load profiles before final settlement
  - Retrieve sample customer data on normal cycle with hand-held devices or remotely via phone lines
  - MV90 VEE process daily
  - Approximately 10 days to complete the VEE process, produce load profiles and validate profiles
  - Actual weather effects and actual customer behavior is captured

# How we Load Profile (cont'd)

- For lower usage SDIs (<200kW), the calculated load profiles are used to distribute an SDI's cumulative kWh to discrete hours



# Future

- Currently there are separate load profiles for the two rate zones in AEP Ohio
- 2015 – Consolidate rate zone samples
- AMI implementaion will reduce number of SDIs that are profiled

# Questions?

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# PJM Settlement – Settlement Quantity Computation

Alan Graves
Manager Load Research

October 1, 2014

# Computed Settlement Quantities

PJM requires that the Electric Distribution Company compute and provide various settlement quantities through procedures established with state regulators

**Network Integration Transmission Service** (PJM Manual 27 Section 5.2)
Each Network Customer pays a monthly demand charge that is based on its daily Network Service Peak Load contribution (including losses).

**Capacity** (PJM Manual 18 Section 7.4)
Each PJM Electric Distribution Company (EDC) is responsible for allocating its normalized previous summer's peak to each customer in the zone

**Hourly Energy**
Settle the market between market sellers and market buyers
Initial Settlement
True-up Settlement

# Settlement Quantities – Required Inputs

- Parameters needed for each SDI
  - Interval metered usage
  - Monthly metered usage used for billing
  - Load Profile ID
  - Load profile values
  - Service voltage class
  - Liability – what entity is responsible for SDI
  - Active / inactive status
- Parameters needed – not SDI related
  - AEP Zonal annual peak date/time & PJM 5 CP date/times
  - Loss factors
  - AEP-Ohio system load

# Computation Process

- NITS and Capacity Tickets (all AEP-OH SDIs)
  - Select actual hourly metered usage for specified dates/times
  - Estimate hourly usage through load profiling process
    - Use actual usage in billing period spanning dates/times
    - Estimate = actual usage in billing period / load profile usage in period X load profile value for specified date/time
    - Assign a class average if no applicable usage exists
  - Apply appropriate loss factor
  - Apply interruption add-back for capacity tickets, as needed
  - Compare sum of all tickets to system load
- NITS and Capacity daily obligations
  - Assign SDI to a CRES
  - Sum ticket values for all SDIs assigned to CRES
  - Deliver to Transmission Settlements / RTO Settlements

# Computation Process – Initial Settlement

- Energy obligation computed daily (all SDIs)
  - PJM timeline doesn't allow for use of actual data
  - Select a similar day-type similar weather historical proxy day
  - Use interval usage from proxy day as usage estimate
  - Estimate hourly usage through load profiling process
    - Use latest billing period usage
    - Use profile from proxy day
    - Estimate = usage in latest billing period / load profile usage in period X load profile value
    - Use unscaled profile if no applicable usage exists
  - Apply appropriate loss factor
  - Assign SDI to CRES
  - Sum values for each hour for all SDIs assigned to CRES
  - Deliver to Transmission Settlements

# Computation Process – True-up Settlement

- Energy obligation computed monthly – middle of 2nd month following (all SDIs)
  - Uses actual hourly usage data for IDR SDIs
  - Estimate hourly usage through load profiling process
    - Use actual billing period usage(s) spanning month
    - Use actual profile
    - Estimate = usage in billing period / load profile usage in period X load profile value
  - Apply appropriate loss factor
  - Assign SDI to CRES
  - Sum values for each hour for all SDIs assigned to CRES
  - Compare sum of all Ohio SDIs to Ohio System Load
  - Calibrate results hourly to Ohio System Load (UFE application)
  - Deliver to Transmission Settlements

# Questions?

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# PJM Settlement – NSPL and Energy Submission

Christopher Werner
Supervisor Transmission Settlements

October 1, 2014

# AEP Transmission Settlements

Key Responsibilities:

- We perform the yearly NSPL Analysis and adjust it daily
- We create all AEP Zone InSchedule contracts, submit energy values to PJM daily, and reconcile the data monthly

Key Contacts:

- Christopher Werner, Transmission Settlements Supervisor cmwerner@aep.com
  Oversees the day to day Transmission Settlements operations, including the PJM Submission
- Martha Sanger, Senior Energy Accounting Analyst masanger@aep.com
  Sets up InSchedule contracts, oversees data transfers, troubleshoots issues
- Tony Smith, Transmission Settlements Analyst I afsmith@aep.com
  Submits daily NSPL and energy values to PJM
- Tommy Abbott, Transmission Settlements Analyst I tdabbott@aep.com
  Tony's backup

# Network Service Peak Load

- The Network Service Peak Load (NSPL) is the Zonal Peak Hour of from the previous year and is used to bill Network Service
- PJM provides the Peak hour to us (last year's peak hour was 7/18/13 HE 15), and we allocate the load to each Load Serving Entity (LSE) in our zone
- We perform this analysis in December, it is due to PJM by the end of the year
- Due to customer switching, PJM allows us to reallocate NSPL contributions on a daily basis
    - The changes are submitted to PJM's eRPM system
    - The due date is 36 hours before the operating day
    - The data submitted represents each companies load on the Peak Hour of the previous year that their customers would have consumed
    - Data is submitted by PJM Shortname

# Energy

- Energy is submitted to PJM's InSchedule system. In the AEP Zone, Transmission Settlements submits all the data.

- In order to submit data to PJM, an InSchedule contract is required
  - Transmission Settlements creates the contract, and the counterparty must confirm it
  - Required information includes Contract Name, Start Date, Stop Date, Type of Pricing (always Real Time), Seller (PJM shortname), Confirmation (always Buyer Unilateral), Source (AEP_Zone), Buyer (always AEPSCT), Service (always Retail Load Responsibility), Sink (Always AEP_ZONE)

- Daily Submission
  - All data is due on the following business day by 2 p.m. (or by 5 p.m. if the following business day is after a weekend or a holiday)
  - Transmission Settlements does not checkout our or manipulate the data except for increasing the load by 3.4126% for losses as prescribed in the PJM and AEP OATT
  - We always submit best available data

- Monthly Reconciliation
  - Reconciliation for an entire month is due by the end of the second month after the operating month (so August reconciliation is due by October 1st)

# Upcoming Changes

There are currently some proposed deadline changes being discussed in the PJM working groups:

- Changing the NSPL deadline from 36 hours before the operating day to 12 hours after the operating day

- Changing the InSchedule deadline from the following business day to the 2nd business day after the operating day

# Questions?

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# CRES Capacity Settlements

Joe Kluczynski
Manager Energy Settlements

October 1, 2014

# Capacity Charge History

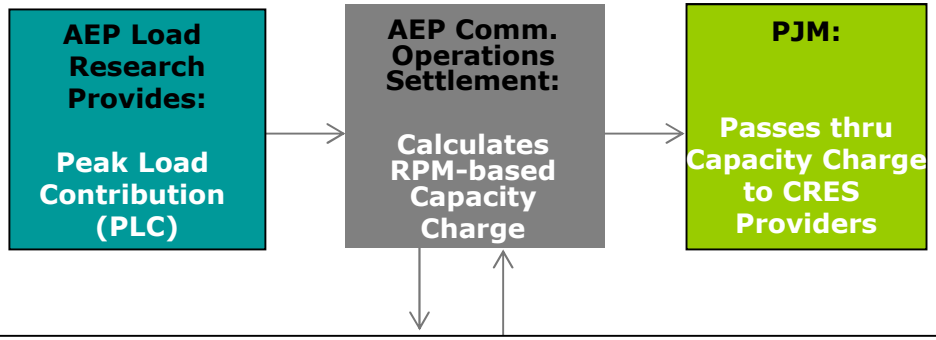
- On July 2, 2012 PUCO Order No. 10-2929-EL-UNC established a capacity cost-based State Compensation Mechanism for AEP of $188.88/MW-day.

- However, to stimulate retail shopping, the PUCO order AEP Ohio to charge CRES providers a discounted rate equal to the Reliability Pricing Model (RPM) price.

- The difference between the $188.88 and the RPM price will be deferred and collected under a separate mechanism to be determined.

- AEP participates as a Fixed Resource Requirement (FRR) entity with PJM to fulfill capacity requirements – not RPM. As such, AEP must calculate the RPM-based capacity charge for CRES providers thru 5/31/2015.

# Data Flow Process




| Determinants | Description | Source |
|---|---|---|
| Peak Load Contribution | Customer Peak Load Contribution adjusted for weather normalization. | AEP Load Research |
| X | | |
| Final Zonal Scaling Factor | Accounts for (1) load growth from a prior-year summer to the Delivery Year; (2) any excess resources procured above those required to exactly meet the FPR requirements. | PJM Manual 18, Section 7 |
| X | | |
| Forecast Pool Requirement | Establishes the level of unforced capacity (UCAP) that will provide an acceptable level of reliability consistent with PJM Reliability Principles and Standards. | PJM Manual 18, Section 2 |
| X | | |
| Final Zonal Capacity Price | Based on third incremental auction in the AEP zone. | PJM Manual 18, Section 5 |
| X | | |
| Transmission Loss Factor | Transmission losses up to point of delivery | PJM OATT Attachment H-14 |

# Determinant Trend

| | Capacity Planning Years | | |
|---|---|---|---|
| | 2012/2013 | 2013/2014 | 2014/2015 |
| Final Zonal Scaling Factor* | 1.06685 | 1.05732 | 1.031284 |
| Forecast Pool Requirement* | 1.0869 | 1.0889 | 1.0926 |
| Transmission Loss Factor | 0.034126 | 0.034126 | 0.034126 |
| Final Zonal Capacity Price* | $16.74 | $28.45 | $128.38 |

* Rates can be found at:
http://www.pjm.com/markets-and-operations/rpm/rpm-auction-user-info.aspx

# Future Process

Proposed (not yet finalized):

- CRES Providers will buy capacity based on RPM from PJM for the 2015/2016 planning year (after 5/31/2015)
- AEP Transmission Settlements will submit CRES Provider PLC's to PJM on a daily basis
- PJM will calculate and submit charge onto CRES Provider bill

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# Drops → to → Write-Offs

Kristine Watts

October 1, 2014

# Frequent questions from suppliers…

- How are supplier charges and balances handled after receiving drop notice?
- How long will AEP Ohio attempt to collect supplier charges and forward payments?
- What happens if customer pays AEP Ohio for CRES charges after Write-Off Date?
- What happens if customer sends payment directly to CRES before Write-Off Date?

# After the drop…

## Will AEP Ohio accept supplier charges after drop notice?

### Active Customers

- AEP Ohio accepts supplier charges after drop date for previous periods customer was with supplier.
- Planning to change this practice in future to reject charges after write-off date; watch for announcement.

### Finalled Accounts

- AEP Ohio will accept supplier charges for one week past the account end date.
- Will reject after that date.

# How long will AEP Ohio attempt to collect and forward payments?

## Active Customers Switching to Different CRES or SSO:

- AEP Ohio will attempt to collect and forward payments for previous supplier for two bill cycles (80 days).
- Will send EDI 248 Write-Off transaction on day 81 for any remaining unpaid supplier balance.

## Finalled Accounts

- AEP Ohio will attempt to collect and forward payments to supplier for 35 days after account end date.
- Will send EDI 248 Write-Off transaction on day 36 for any remaining unpaid supplier balance.

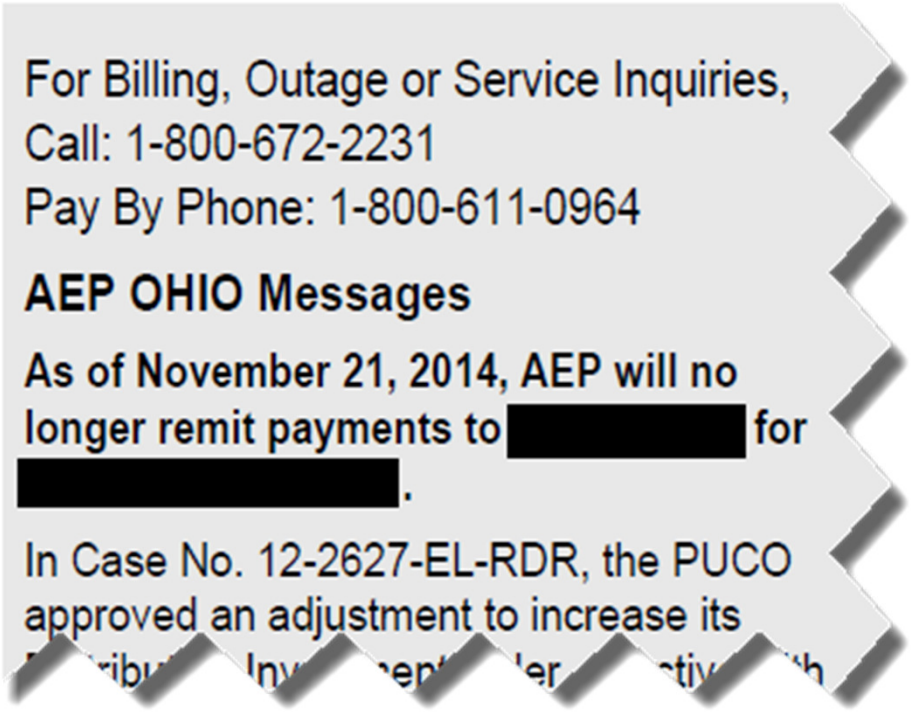
# Important to note…

- Effective end date included in drop notice.

- If customer is opening service at a new location, AEP Ohio transfers only the utility's charges.

# Customer bill BEFORE write-off…

- Bill message informs customer of last day AEP Ohio will forward payments to previous supplier.


For Billing, Outage or Service Inquiries,
Call: 1-800-672-2231
Pay By Phone: 1-800-611-0964

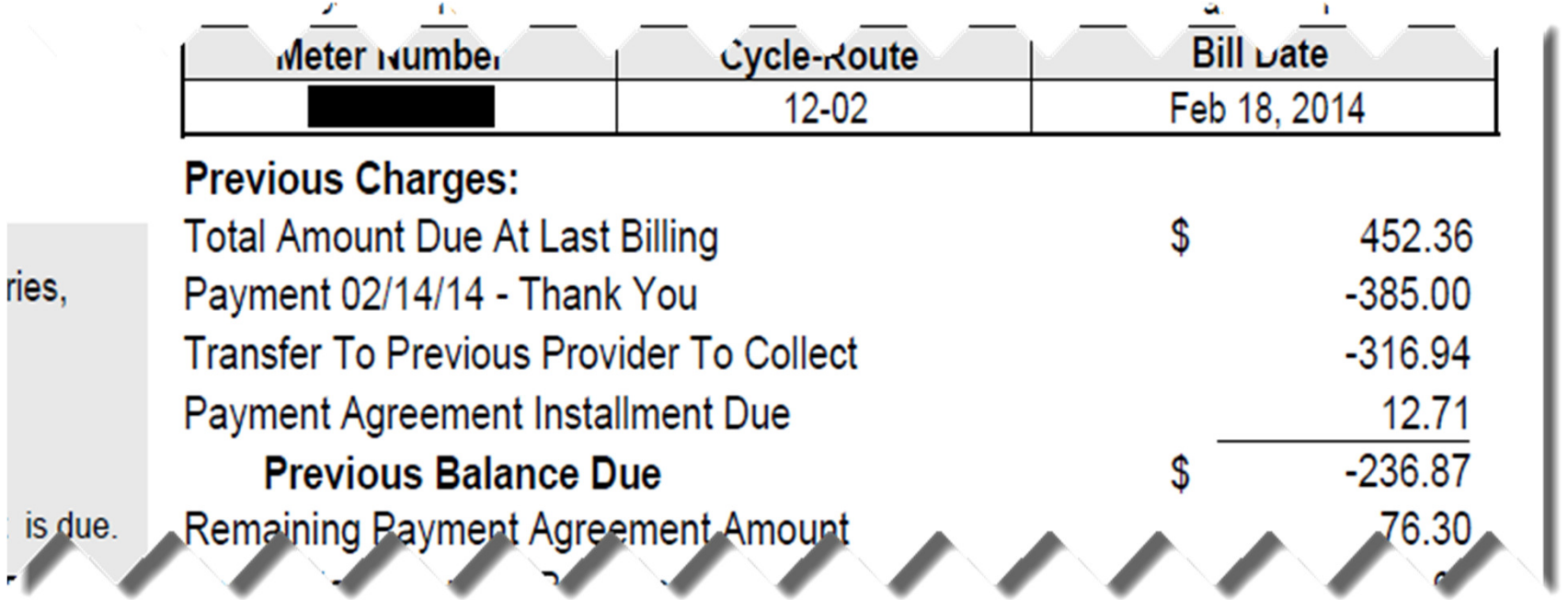
**AEP OHIO Messages**

**As of November 21, 2014, AEP will no longer remit payments to [redacted] for [redacted].**

In Case No. 12-2627-EL-RDR, the PUCO approved an adjustment to increase its

# Customer bill AFTER write-off…

Write-off appears on customer bill as:
"Transfer to Previous Provider to Collect"



| Meter Numbe | Cycle-Route | Bill Date |
|---|---|---|
| [redacted] | 12-02 | Feb 18, 2014 |

**Previous Charges:**

| | | |
|---|---|---|
| Total Amount Due At Last Billing | $ | 452.36 |
| Payment 02/14/14 - Thank You | | -385.00 |
| Transfer To Previous Provider To Collect | | -316.94 |
| Payment Agreement Installment Due | | 12.71 |
| **Previous Balance Due** | $ | -236.87 |
| Remaining Payment Agreement Amount | | 76.30 |

# If customer pays AEP Ohio for CRES charges AFTER write-off . . .

- AEP Ohio no longer shows liability to CRES after the write-off is sent.
- Will not forward payment to CRES after write-off date.
- Will apply customer payment to customer's account. If results in credit balance on a closed account, we will refund customer or transfer credit balance to new account.
- Customer will not lose the benefit of that payment.

# If customer pays CRES directly BEFORE Write-Off . . .

Recommended options:

- Supplier send refund check to customer so customer can pay AEP Ohio

- O R -

- Supplier send check to AEP's remittance address on customer's behalf

- O R -

- Supplier send EDI miscellaneous credit adjustment to apply to customer's account

# Questions?

# LUNCH!

AEP OHIO®
A unit of American Electric Power

# Welcome from Customer Services & Marketing

Karen Sloneker

October 1, 2014

AEP OHIO®
A unit of American Electric Power

# AEPCH Operations & Projects

Michelle Kaseff, Ken Roberts

October 1, 2014

# Customer Choice Processes & Systems

- Provide support to multiple supplier support groups in AEP Ohio, AEP Texas, AEP I&M, AEP Appalachian Power – Virginia
  - Research and resolve process and system issues
  - Prioritize break/fix and enhancement requests
  - Manage the PJM supplier load carve-out
- Manage EDI Choice systems and transaction processing
  - Assure compliance with EDI guidelines
  - Perform EDI flight testing with new suppliers
  - Represent/support AEP operating companies in market working groups
  - Execute yearly Disaster Recovery system testing
- Prepare IT capital project work requests
  - IT Business cases and work requests
  - Perform user acceptance testing
- Implement and coordinate Sarbanes – Oxley audit controls

# What is AEPCH?

## AEP Market Data Clearing House

- Suite of applications that handle the transfer of information between Choice Market participant systems and AEP systems.
  - Enrollment and Switching of Customers
  - Service Order Requests and Acknowledgements
  - Billing and Usage Data
  - Load Estimation and Reallocation for non-ERCOT markets
- AEPCH and help-desk support is managed by staff 6 days a week, Monday through Saturday until 9 pm.

# System Improvements

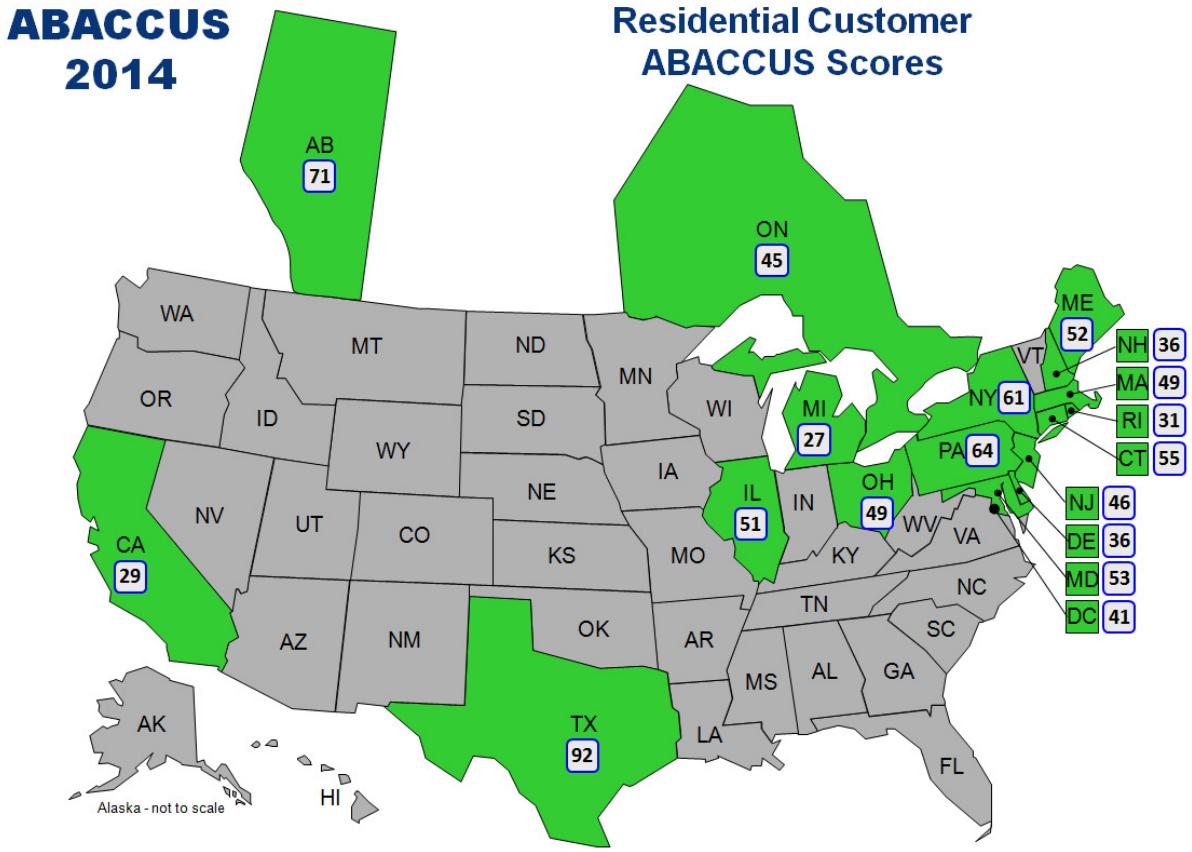
AEPCH Servers Life-cycled

- 8 Unix and 10 Intel servers (test, dev., QA and prod. regions)
- 29 Oracle databases and 5 SQL server databases
- 8 major applications
- 15 Billion rows / 750 gigabytes of data
- 334 user acceptance test cases executed
- Over 760 hours of system performance testing and tuning

On average the AEPCH processes over 6 million EDI transactions monthly – over 13 million including internal messaging

- Texas consumption data files
- Texas Invoice files
- Ohio bill data transactions
- Ohio enrollment requests
- Historical usage requests
- Michigan is in progress

# Electric Deregulation in North America



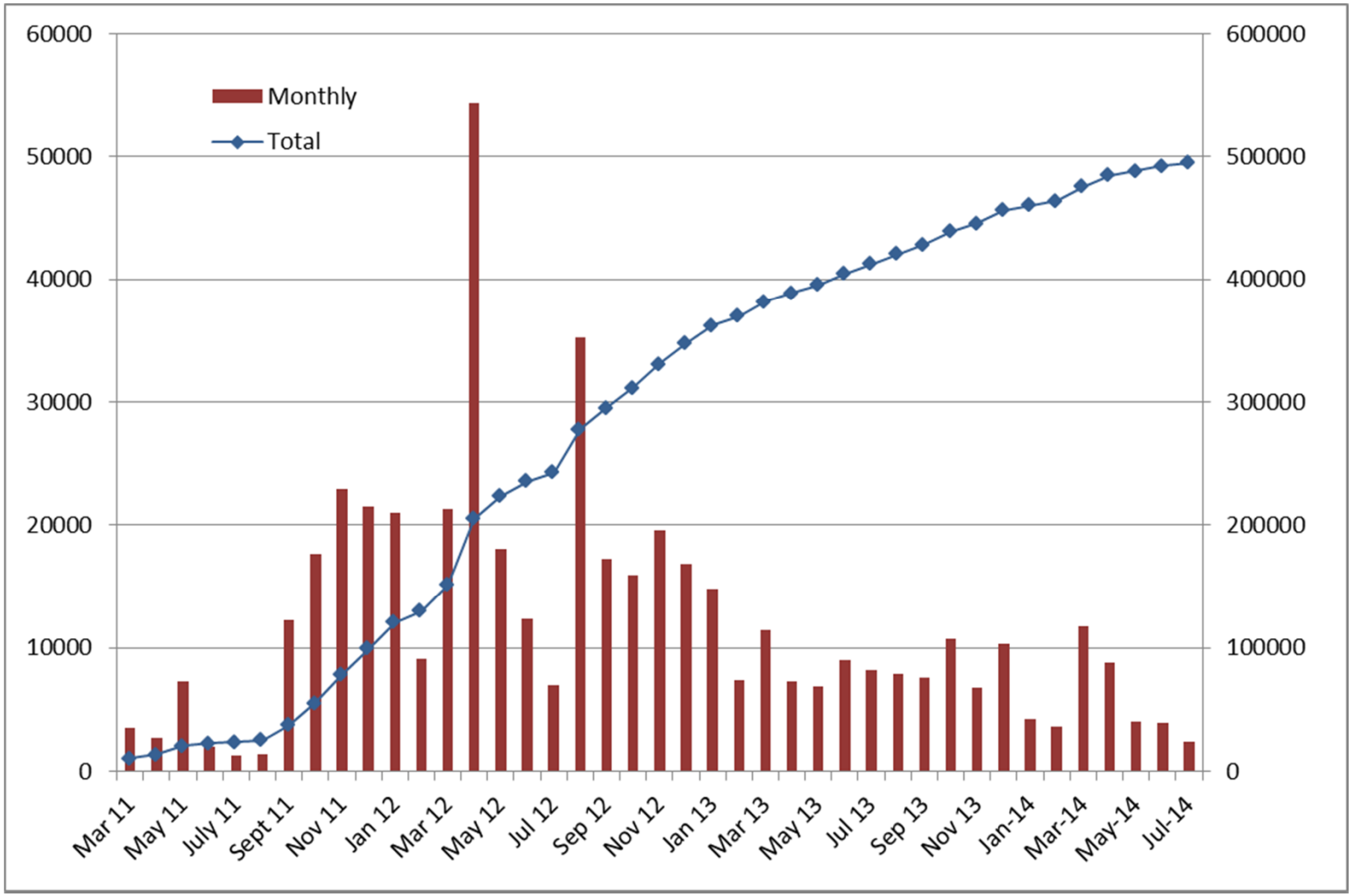

*Source: 2014 Annual Baseline Assessment of Choice in Canada and the US (ABACCUS)*

*http://defgllc.com/publication*

**Residential Customers Taking Competitive Electric Service**

| Jurisdiction | Customers |
|---|---|
| **Texas** | **5,854,000** |
| Illinois | 3,077,000 |
| **Ohio** | **2,106,000** |
| Pennsylvania | 1,877,000 |
| New York | 1,389,000 |
| Connecticut | 605,000 |
| Alberta | 542,000 |
| New Jersey | 536,000 |
| Maryland | 524,000 |
| Massachusetts | 399,000 |
| Maine | 214,000 |

# AEP Ohio Monthly Switched Customers




Total switched customers now approaching 500k

# Other Improvements

System/EDI Changes

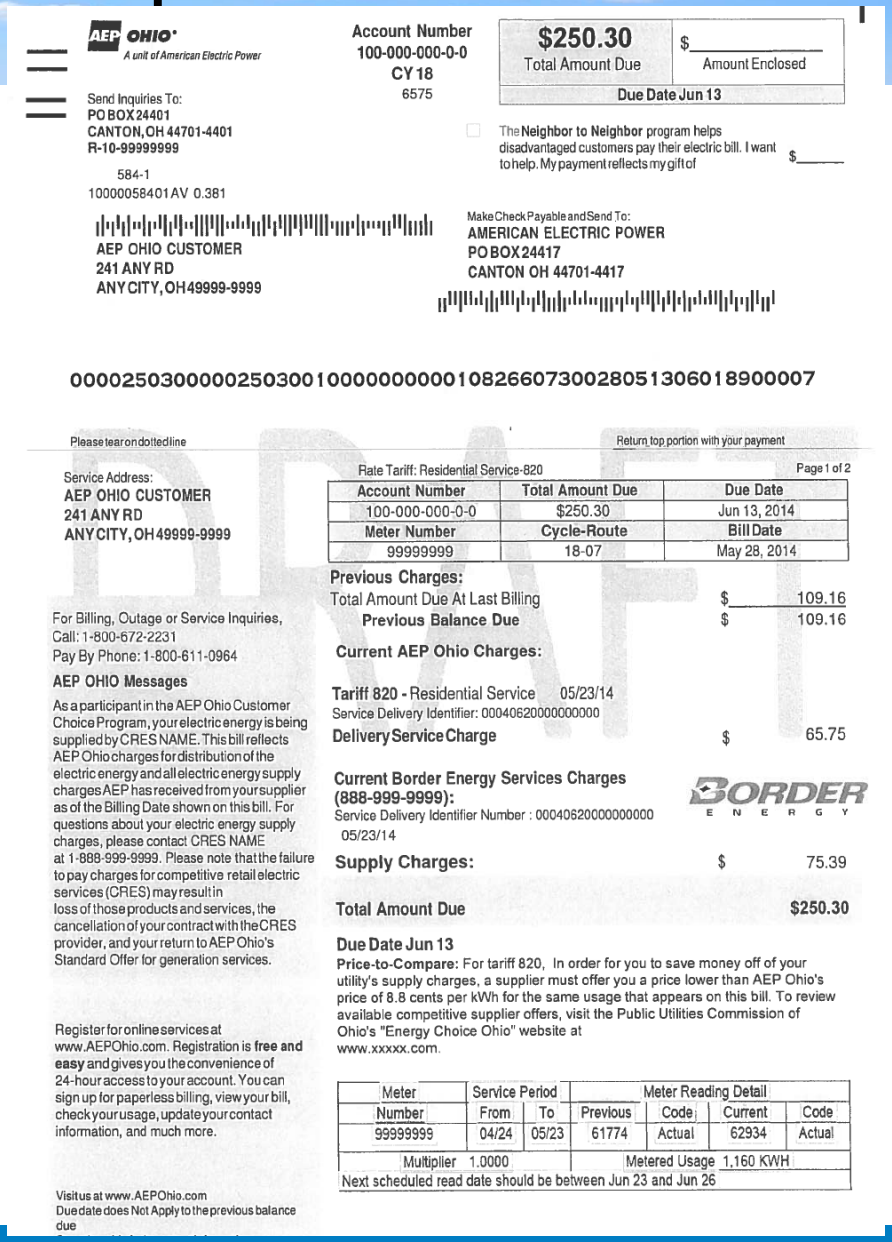
- Replaced A13 Reject codes with OEWG approved codes
- Validations to not allow switches from two providers on the same date
- Removed minimum stay requirements
- Changed switch fee to bill providers and reduced to $5
- Improved Historical Usage message responses
- Added budget billing indicator on EDI 814 ER
- Added rate sub-class description 867 HU– change control
- Added the peak demand the EDI 814ER – change control
- Implemented 810 Auto-cancel logic
- Added Net Metering indicator to Aggregation and Pre-enrollment lists

# Ohio Market Changes

RMI Order

- Establish a Market Development Working Group (MDWG)
- Implement Seamless Move / Contract Portability / “Choice” Transfer within 1 year of MDWG approval
- Bill Format Changes: Provider Logos / Standard Terminology
- Additional data sharing requirements with CRES for customers on pay arrangements
- Code of Conduct Audit – AEP 2016
- EDUs to offer time differentiated rates for AMI until market develops
- EDUs and Staff to develop “website registration system”

# AEP Ohio Proposed Bill Format Changes



AEP OHIO
A unit of American Electric Power

Account Number
100-000-000-0-0
CY 18
6575

$250.30 Total Amount Due
$_____ Amount Enclosed
Due Date Jun 13

Send Inquiries To:
PO BOX 24401
CANTON, OH 44701-4401
R-10-99999999

584-1
10000058401 AV 0.381

AEP OHIO CUSTOMER
241 ANY RD
ANY CITY, OH 49999-9999

☐ The **Neighbor to Neighbor** program helps disadvantaged customers pay their electric bill. I want to help. My payment reflects my gift of $_____

Make Check Payable and Send To:
AMERICAN ELECTRIC POWER
PO BOX 24417
CANTON OH 44701-4417

00002503000002503001000000000108266073002805130601 8900007

Please tear on dotted line — Return top portion with your payment

Page 1 of 2

Service Address:
AEP OHIO CUSTOMER
241 ANY RD
ANY CITY, OH 49999-9999

Rate Tariff: Residential Service-820

| Account Number | Total Amount Due | Due Date |
|---|---|---|
| 100-000-000-0-0 | $250.30 | Jun 13, 2014 |
| **Meter Number** | **Cycle-Route** | **Bill Date** |
| 99999999 | 18-07 | May 28, 2014 |

**Previous Charges:**
Total Amount Due At Last Billing $ 109.16
**Previous Balance Due** $ 109.16

**Current AEP Ohio Charges:**

**Tariff 820 -** Residential Service 05/23/14
Service Delivery Identifier: 00040620000000000
**Delivery Service Charge** $ 65.75

**Current Border Energy Services Charges (888-999-9999):**
Service Delivery Identifier Number : 00040620000000000
05/23/14
BORDER ENERGY
**Supply Charges:** $ 75.39

**Total Amount Due** **$250.30**

**Due Date Jun 13**

**Price-to-Compare:** For tariff 820, In order for you to save money off of your utility's supply charges, a supplier must offer you a price lower than AEP Ohio's price of 8.8 cents per kWh for the same usage that appears on this bill. To review available competitive supplier offers, visit the Public Utilities Commission of Ohio's "Energy Choice Ohio" website at www.xxxxx.com.

| Meter Number | Service Period From | To | Meter Reading Detail Previous | Code | Current | Code |
|---|---|---|---|---|---|---|
| 99999999 | 04/24 | 05/23 | 61774 | Actual | 62934 | Actual |
| Multiplier 1.0000 | | | Metered Usage 1,160 KWH | | | |
| Next scheduled read date should be between Jun 23 and Jun 26 | | | | | | |

For Billing, Outage or Service Inquiries,
Call: 1-800-672-2231
Pay By Phone: 1-800-611-0964

**AEP OHIO Messages**

As a participant in the AEP Ohio Customer Choice Program, your electric energy is being supplied by CRES NAME. This bill reflects AEP Ohio charges for distribution of the electric energy and all electric energy supply charges AEP has received from your supplier as of the Billing Date shown on this bill. For questions about your electric energy supply charges, please contact CRES NAME at 1-888-999-9999. Please note that the failure to pay charges for competitive retail electric services (CRES) may result in loss of those products and services, the cancellation of your contract with the CRES provider, and your return to AEP Ohio's Standard Offer for generation services.

Register for online services at www.AEPOhio.com. Registration is **free and easy** and gives you the convenience of 24-hour access to your account. You can sign up for paperless billing, view your bill, check your usage, update your contact information, and much more.

Visit us at www.AEPOhio.com
Due date does Not Apply to the previous balance due

DRAFT

# In Progress Changes

Maintain Liability Project – Nov. 2014

- Switch/drop date within pend window
- Improved updates on on/off dates changes
- Cycle change after switch - updates improved, no manual billing

Write-off logic – Nov. 2014

- FRED – Financial Responsibility End Date
- New logic to limit 810 transactions after the write-off has occurred
- Rate Ready – no bill calculations/no 810's
- 867's will still be sent

MI EDI – using same EDI as OH – Dec. 2014

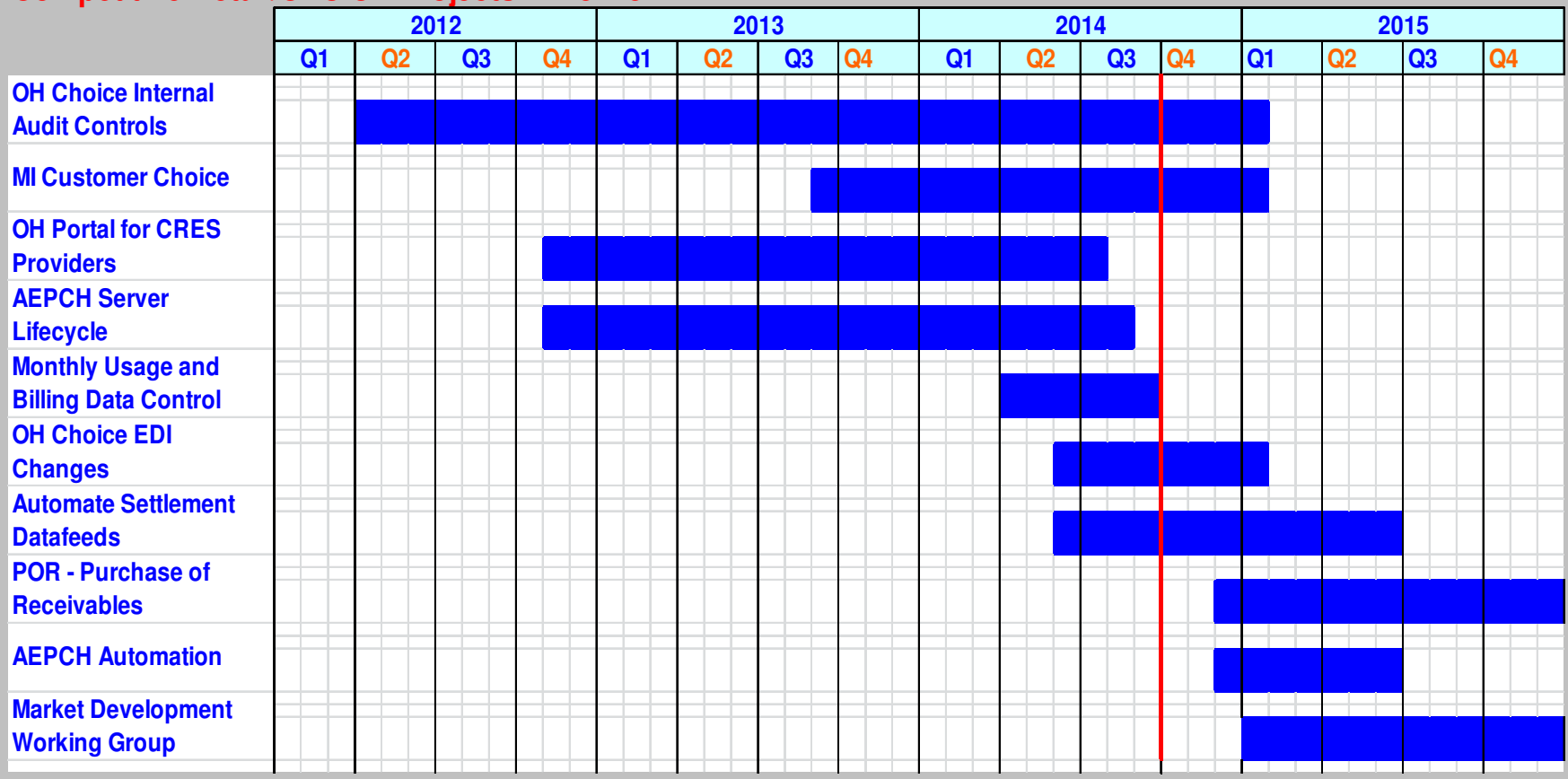
# Future Changes

EDI Working Group changes

- IP - Add on peak and total usage as separate buckets on 867 HU (CC110)
- Add effective date to PLC and NSPL values in 867HU and 867 HIU
- Include data indicating a special meter configuration exists
- Include rate sub-class on Historical usage messages for non-meter accounts and 867 HI
- Populate effective date of adjust on/adjust off dates in 814C
- Send 824 reject when providers miss the bill window (Uniformity List)
- Add demand loop to 867 historical usage response
- Add standard interconnection point (Substation Name) to 814E
- Add third party info for copy of invoices

# Choice Timeline

## Competitive Retail/CHOICE Projects Timeline



# Questions?

gridSMART®

From AEP OHIO®

# AEP Ohio gridSMART®

Update for CRES Workshop
Scott Osterholt

October 1, 2014

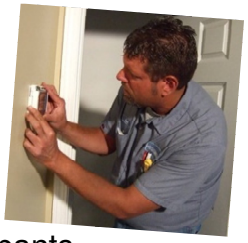
# What is gridSMART®?

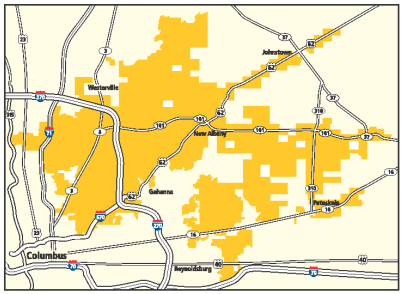
- **gridSMART is deploying automation to improve the distribution network:**
  - Advanced Metering Infrastructure (AMI)
    - Meter related labor reductions
    - Remote reconnections
    - Facilitates time-of-use (TOU) tariffs and other customer programs
  - Distribution Automation Circuit Reconfiguration (DACR)
    - Improve outage identification and restoration times
    - Improve circuit reliability
    - Potential crew savings ~ up to 2 hours per event
  - Volt VAR Optimization (VVO)
    - Reduction in energy consumption (~3 percent)
    - Reduction in peak demand on circuits (~2 percent-3 percent)

# gridSMART® Phase 1

## $150M Demonstration Project with the following major components


Consumer Programs – 10k participants





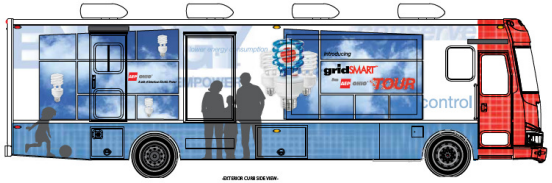

Volt VAR Optimization – 17 circuits

DACR – 70 circuits

Cyber Security Operations Center

Plug-In Electric Vehicle – 10-unit demo with Level 2 Charging Stations

Community Energy Storage




Customer Education and Outreach

AMI Meters – 132k Deployed

Smart Appliances – 20 participants

# gridSMART® Phase 1: Success!

- Distribution Automation
  - 6,666,394 customer outage minutes reduced (data from 9/20/2014)
- Volt VAR Optimization
  - Reduced overall and peak energy consumption by approximately 3 percent
- AMI Meters
  - 131,500 meters deployed
- Consumer Programs
  - 11,785 Customers Enrolled in six Consumer Programs
  - 8,930 Installations Completed
  - 4,181 Current Active Participants (data from 9/10/2014)

# gridSMART® Phase 2 Plan

- **Scope**
  - Advanced Metering Infrastructure (AMI) in most populated cities – approximately 900,000 meters
  - Distribution Automation Circuit Reconfiguration (DACR) on approximately 250 circuits
  - Volt VAR Optimization (VVO) on approximately 80 circuits
- **Deployment – 4 years**
  - AMI – approximately $165M initial Capital
  - DACR – approximately $110M initial Capital
  - VVO – approximately $20M initial Capital

# gridSMART® Phase 2 Status


- **Still working toward approval**
  - Numerous stipulation discussions with Interveners
  - Awaiting impact and effects of EPA Rule 111D on VVO

# Time-of-Use (TOU) Tariffs

## Desired Outcomes by Party

- AEP Ohio – views TOU as a generation market option (we are an infrastructure provider)
- PUCO Staff – appears focused on having TOU programs available for customers from Day 1
- CRES Providers – appear interested in offering these programs and for AEP Ohio to be able to provide billing data and billing services

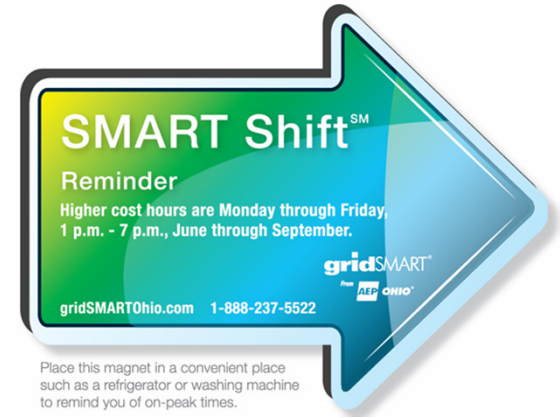
# gridSMART® TOU Program Transition Plan

- AEP Ohio continues to offer existing gridSMART TOU programs in the short term
- CRES could provide pricing program alternatives
- CRES programs would need to mimic gridSMART programs in the short term
- Rate Ready and Bill Ready Billing Services available (pending funding)
- CRES would call CPP events 24 hours in advance – AEP Ohio to administer
- CRES would be responsible for customer communication for CPP events
- Transition via program termination communication from AEP Ohio – citing other alternatives

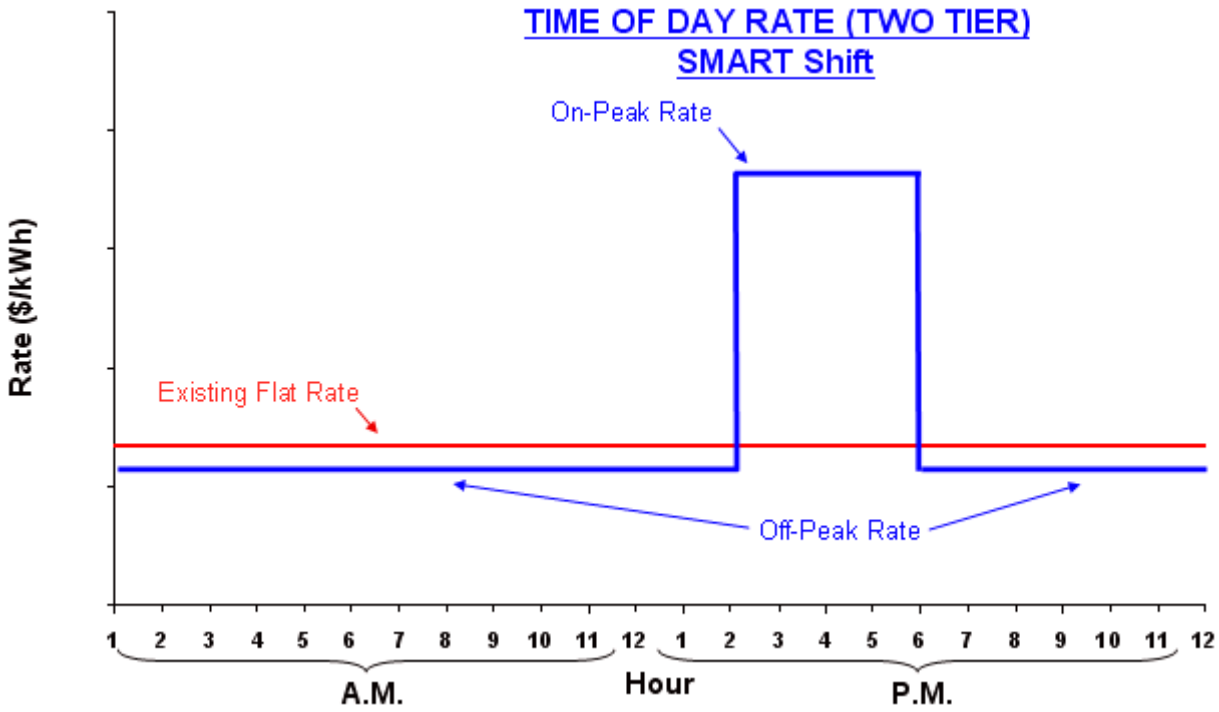
# SMART Shift℠

2 tier Time-of-Day (TOD) – on/off peak

- On Peak - June 1 to Oct. 1 from 1pm – 7pm (non-holiday weekdays only)
- Off Peak - all winter & June 1 to Oct. 1 from 7pm to 1pm

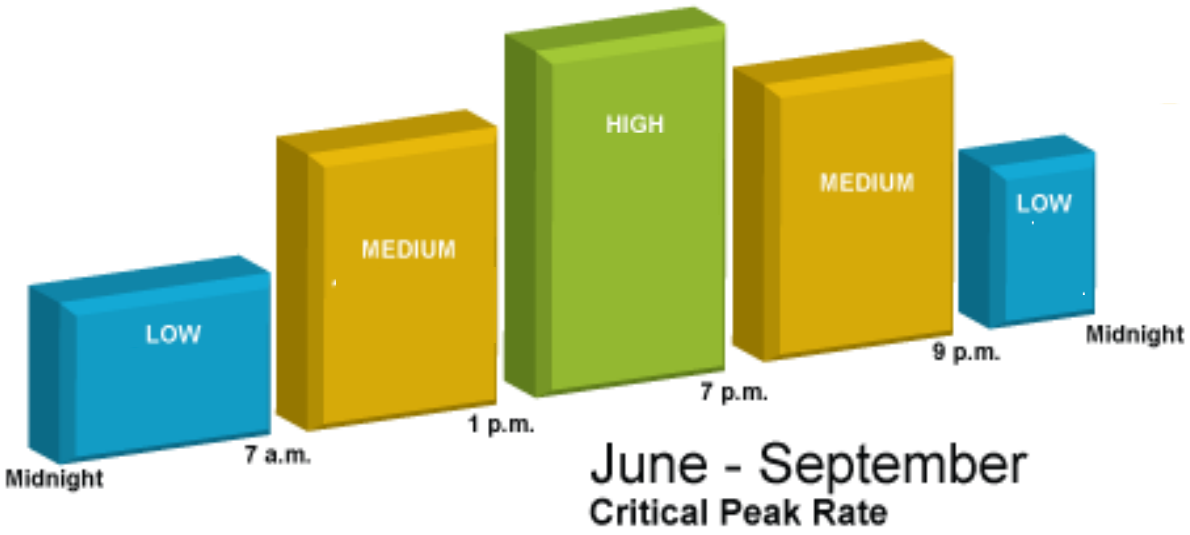


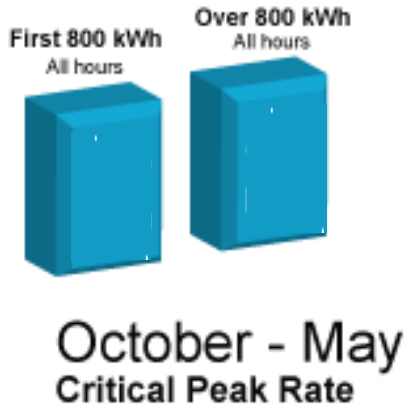

738 Active Participants



# SMART Shift Plus℠

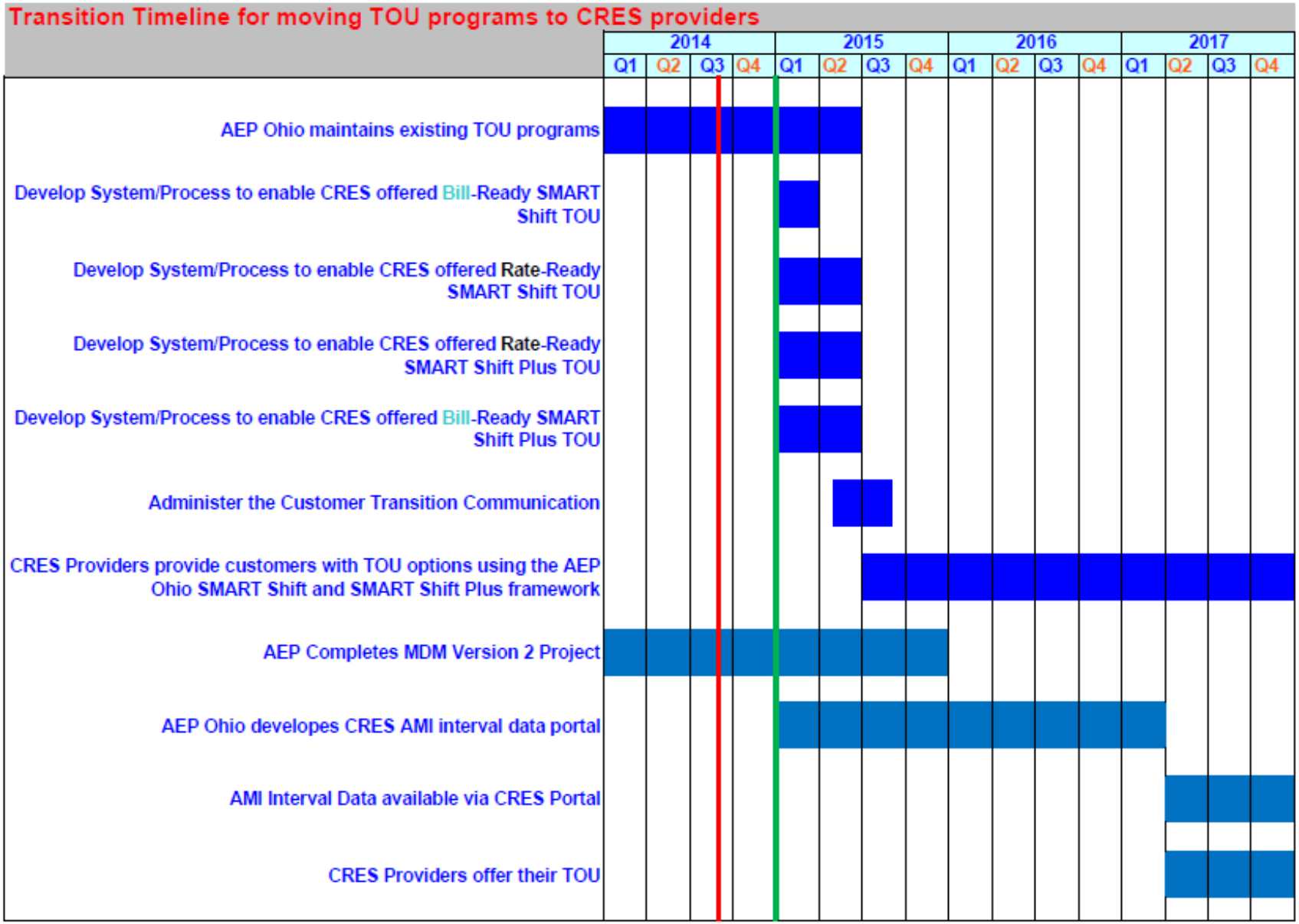
- 3 tier + Critical Peak Pricing (CPP) – on/off/shoulder/fixed price CPP




140 Active Participants

# TOU Transition Timeline



# Questions?

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# Reinstatements – 814R

Anita Adams

October 1, 2014

# Reinstatements

- Ohio Electric Implementation Guidelines

- EDI 814R

# Reinstatements

Ohio EDI Guidelines Says…

- 814R is used for:
  - Reinstatements
  - Response
  - Request

# Who Submits 814R's

- Suppliers
- AEP Ohio

# Supplier Uses 814R…

Supplier Scenario:

- Supplier submits a drop due to an expired customer contract
- Customer signs renewal or new contract with same supplier
- Customer wants to return to supplier
- Supplier wants to stop the drop
- Must be at least 6 days prior to drop date

# AEP Ohio Uses 814R

AEP Ohio Scenario:

- Customer is with Supplier A and enrolls with Supplier B
- Drop notice sent to Supplier A
- Customer objects to switch to Supplier B during rescission period
- AEP Ohio sends 814R to Supplier A

# Ohio EDI 814R

## Reinstatement to current provider:

H.ST: ST*814*0001H.BGN:
BGN*13*CRES4330363B405665999*20140301H.N
1.N1: N1*8S*OHIO POWER
COMPANY*1*002899953**41H.N1.N1: N1*SJ*
N1*SJ***SUPPLIER NAME**
SERVICES*1*077778954**40H.N1.N1:
N1*8R*CUSTOMER NAME
INC*92*0793468132B.LIN.LIN:
LIN***REIN**5638111*SH*EL*SH*CEB.LIN.ASI:
ASI*7*025B.LIN.REF:
REF*1P*EB3***WITHDRAWN**B.LIN.REF:
REF*Q5*0014006079346813 2B.LIN.DTM:
DTM*150*20140310B.SE: SE*11*0001

# Questions?

# BREAK!

AEP OHIO®
A unit of American Electric Power

# Variance in Billable Usage Compensating Meter Multiplier Interval Usage from Portal (Time Permitting)

Doug Hinkle

October 1, 2014

# What we'll cover…

- What is the variance in usage?
- What causes the difference?
- Why is there a difference?
- CMM Factors
- How this may/may not impact billing
- Interval data from the web portal

# Actual Inquiry

- Provider contacts AEP Ohio:

*"We have received usage for period 7/28 – 8/28 and the summary data is posted as 5,349,600 kWh however the sum of the intervals equals 5,347,311.84 kWh Could you please verify this data? What is the reason for the discrepancy?"*

# Where the difference is…

- AEP Ohio bills the summary usage value
  - Based on the index reads from the meter
- If you bill the customer based on the intervals or are comparing, there will almost always be a difference.

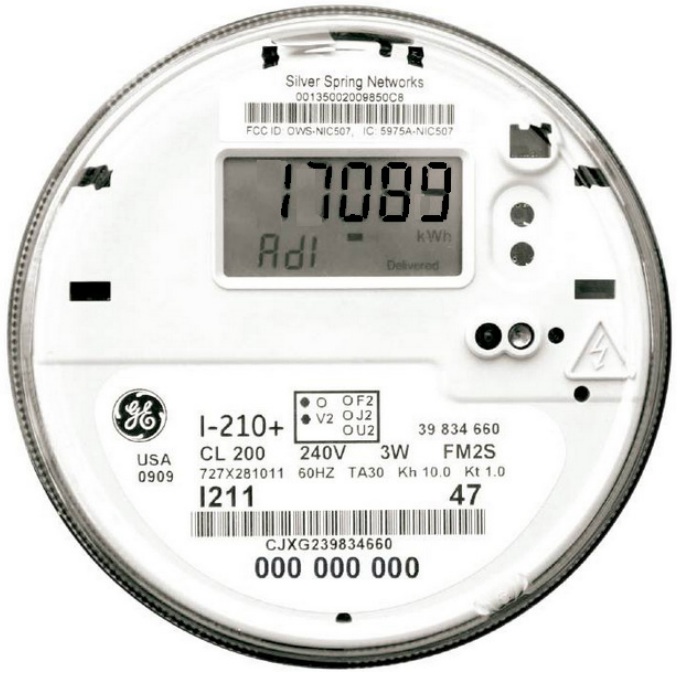
# Continuing with the example…

- July 28 AEP gets index read of 017089
  - An index read is not the usage, but the physical numerical display on the meter itself.
  - We're also obtaining the intervals (via phone line, probing, etc)
- August 28 AEP gets an index read of 017832
- The customer has a bill constant of "7200"
  - For every increment, advancement or 'tick' on the meter, it's multiplied by 7200

# Index Reads

August 28


July 28




17832 - 17089 = 743

# Doing the math…

017832-017089=743

This means the meter has seen increments or “ticked” 743 times over the revenue period.

743 x 7200 (Bill Constant or Meter Multiplier)= 5,349,600 kWh

There is typically a variance within +/- (2*Bill Constant) between the cumulative usage and intervals when they’re compared.

5,349,600 - 5,347,311.84 = 2288.16

**2288 is < 14400*

# EDI 867MU

B.PTD.DTM: DTM*150*20140728
B.PTD.DTM: DTM*151*20140828 Revenue Periods
B.PTD.REF: REF*MG*Meter A
B.PTD.REF: REF*MT*KH015
B.PTD.REF: REF*JH*A
B.PTD.QTY.QTY: QTY*QD*5349600*KH
B.PTD.QTY.MEA: MEA*AA*PRQ*5349600*KH*17089*17832*51 Index Reads
B.PTD.QTY.MEA: MEA**MU*7200 Meter Multiplier

# Questions?

# Compensating Meter Multiplier

- Depending on where the meter is placed in regards to the official delivery point of the customer and the transformer (accounting for core loss), AEP Ohio applies a factor to some customers' metered usage to determine the billable amount.
  - ~125 switched accounts currently
  - 17 have a factor of 0.98 applied
  - The remainder have a factor of 1.01 applied

# Current AEP 867MU in Production

- AEP communicates the core loss factor in the MEA segment
  - MEA**CO*1.01
- The QTY segment in the summary loop contains the metered usage.
  - CMM Factor not applied to this value
- Individual intervals are billed usage.
  - CMM Factor **applied** to each 15-minute interval

# Non-Interval Account

B.PTD.PTD: PTD*SU
B.PTD.DTM: DTM*150*20140725
B.PTD.DTM: DTM*151*20140822
B.PTD.QTY.QTY: QTY*QD*15600*KH <---Metered Usage (CMM Not applied)
B.PTD.PTD: PTD*PL
B.PTD.DTM: DTM*150*20140725
B.PTD.DTM: DTM*151*20140822
B.PTD.REF: REF*IX*5.00*KHMON*TU~51
B.PTD.REF: REF*JH*A
B.PTD.REF: REF*MG*METER A
B.PTD.REF: REF*MT*KHMON
B.PTD.REF: REF*NH*840
B.PTD.REF: REF*PR*221
B.PTD.QTY.QTY: QTY*QD*15600*KH
B.PTD.QTY.MEA: MEA*AA*PRQ*15600*KH*274*287*51
B.PTD.QTY.MEA: MEA**MU*1200
B.PTD.QTY.MEA: MEA**CO*.98 <---Core Loss Factor

# Interval Account

B.PTD.DTM: DTM*150*20140731
B.PTD.DTM: DTM*151*20140828
B.PTD.REF: REF*MG*METER A
B.PTD.REF: REF*MT*KH015
B.PTD.REF: REF*JH*A
B.PTD.QTY.QTY: QTY*QD*352800*KH <---Metered Usage (CMM not applied)
B.PTD.QTY.MEA: MEA*AA*PRQ*352800*KH*613*662*51
B.PTD.QTY.MEA: MEA**MU*7200
B.PTD.QTY.MEA: MEA**CO*1.01 <---Core Loss Factor
B.PTD.PTD: PTD*PM
B.PTD.QTY.QTY: QTY*QD*103.26*KH
B.PTD.QTY.DTM: DTM*194*20140731*001500*ET
B.PTD.QTY.QTY: QTY*QD*101.81*KH
B.PTD.QTY.DTM: DTM*194*20140731*003000*ET
B.PTD.QTY.QTY: QTY*QD*101.81*KH
B.PTD.QTY.DTM: DTM*194*20140731*004500*ET

Individual intervals where CMM are applied.

# How it could impact billing…

| DATE | TIME | Metered kWh | Billed kWh (1% higher) |
|---|---|---|---|
| 073114 | 0015 | 102.240 | 103.26 |
| 073114 | 0030 | 100.800 | 101.81 |
| 073114 | 0045 | 100.800 | 101.81 |

B.PTD.QTY.QTY: QTY*QD*103.26*KH
B.PTD.QTY.DTM: DTM*194*20140731*001500*ET
B.PTD.QTY.QTY: QTY*QD*101.81*KH
B.PTD.QTY.DTM: DTM*194*20140731*003000*ET
B.PTD.QTY.QTY: QTY*QD*101.81*KH
B.PTD.QTY.DTM: DTM*194*20140731*004500*ET

Summary Usage sent = 352,800 kWh  AEP Ohio Bills = 356,328 kWh

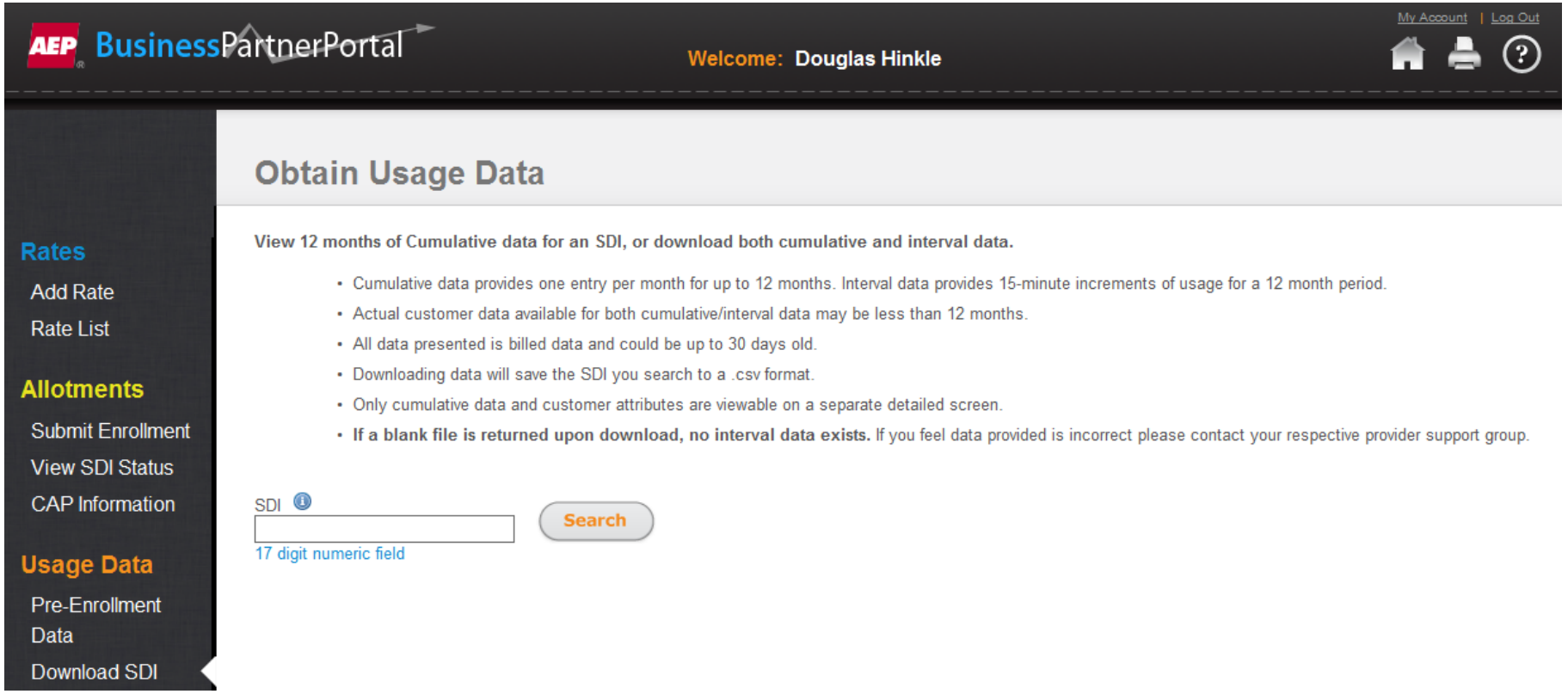
1% Difference in this scenario (for one month) is 3,528 kWh

****If you're billing your customer the summary value, you may be under/overbilling your customer.****

# Questions?

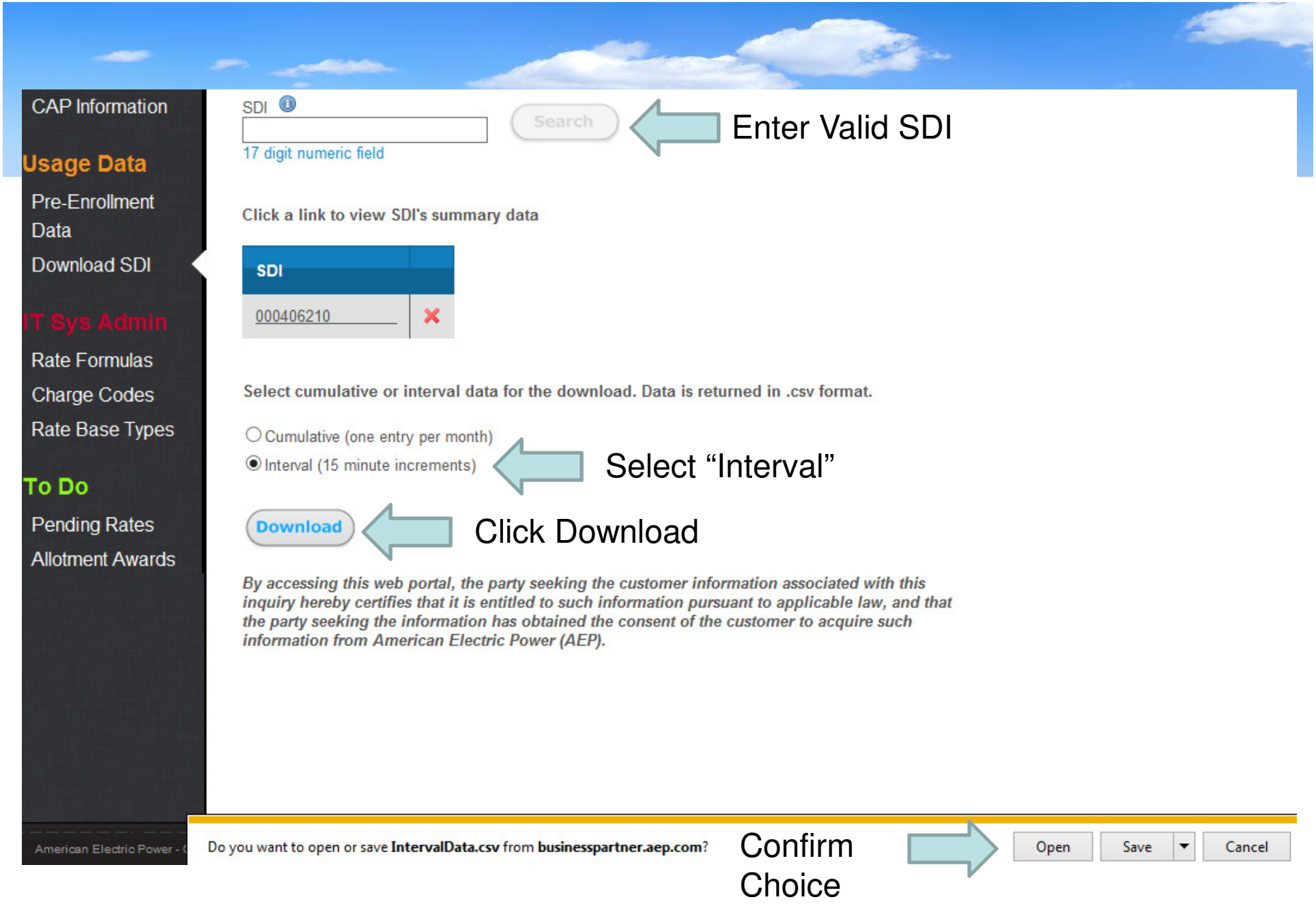
# Obtaining Interval Data from BPP

- https://businesspartner.aep.com
- Log In with UN/PW (if you're not registered, contact Ohio Choice Ops)



# Obtaining Interval Data

- Enter valid SDI
- If interval data is available, select “Interval” radio button
- Click “Download”
- After some time, a prompt will ask whether you would like to Open, Save or Cancel


CAP Information
Usage Data
Pre-Enrollment Data
Download SDI
IT Sys Admin
Rate Formulas
Charge Codes
Rate Base Types
To Do
Pending Rates
Allotment Awards
SDI
Search
17 digit numeric field
Enter Valid SDI
Click a link to view SDI's summary data
SDI
000406210
Select cumulative or interval data for the download. Data is returned in .csv format.
Cumulative (one entry per month)
Interval (15 minute increments)
Select "Interval"
Download
Click Download
By accessing this web portal, the party seeking the customer information associated with this inquiry hereby certifies that it is entitled to such information pursuant to applicable law, and that the party seeking the information has obtained the consent of the customer to acquire such information from American Electric Power (AEP).
American Electric Power
Do you want to open or save IntervalData.csv from businesspartner.aep.com?
Confirm Choice
Open
Save
Cancel

# Business Partner Portal

- AEP displays the billed usage
- CMM factor applied

Detailed Summary Screen:

| Month | Tariff Code | Bill Period Start | Bill Period End | # Of Days in Period | Billed kWh | On Peak kWh Usage | Off Peak kWh Usage | Billed kW | Interval Data |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 861 | 08/01/2014 | 08/29/2014 | 28 | 356328.0000000 | 0.0000000 | 0.0000000 | 1000.0000000 | Y |
| 2 | 861 | 07/02/2014 | 07/31/2014 | 29 | 341784.0000000 | 0.0000000 | 0.0000000 | 1000.0000000 | Y |
| 3 | 861 | 06/03/2014 | 07/01/2014 | 28 | 341784.0000000 | 0.0000000 | 0.0000000 | 1000.0000000 | Y |
| 4 | 861 | 05/02/2014 | 06/02/2014 | 31 | 283608.0000000 | 0.0000000 | 0.0000000 | 1000.0000000 | Y |
| 5 | 861 | 04/02/2014 | 05/01/2014 | 29 | 225432.0000000 | 0.0000000 | 0.0000000 | 1000.0000000 | Y |

# Questions?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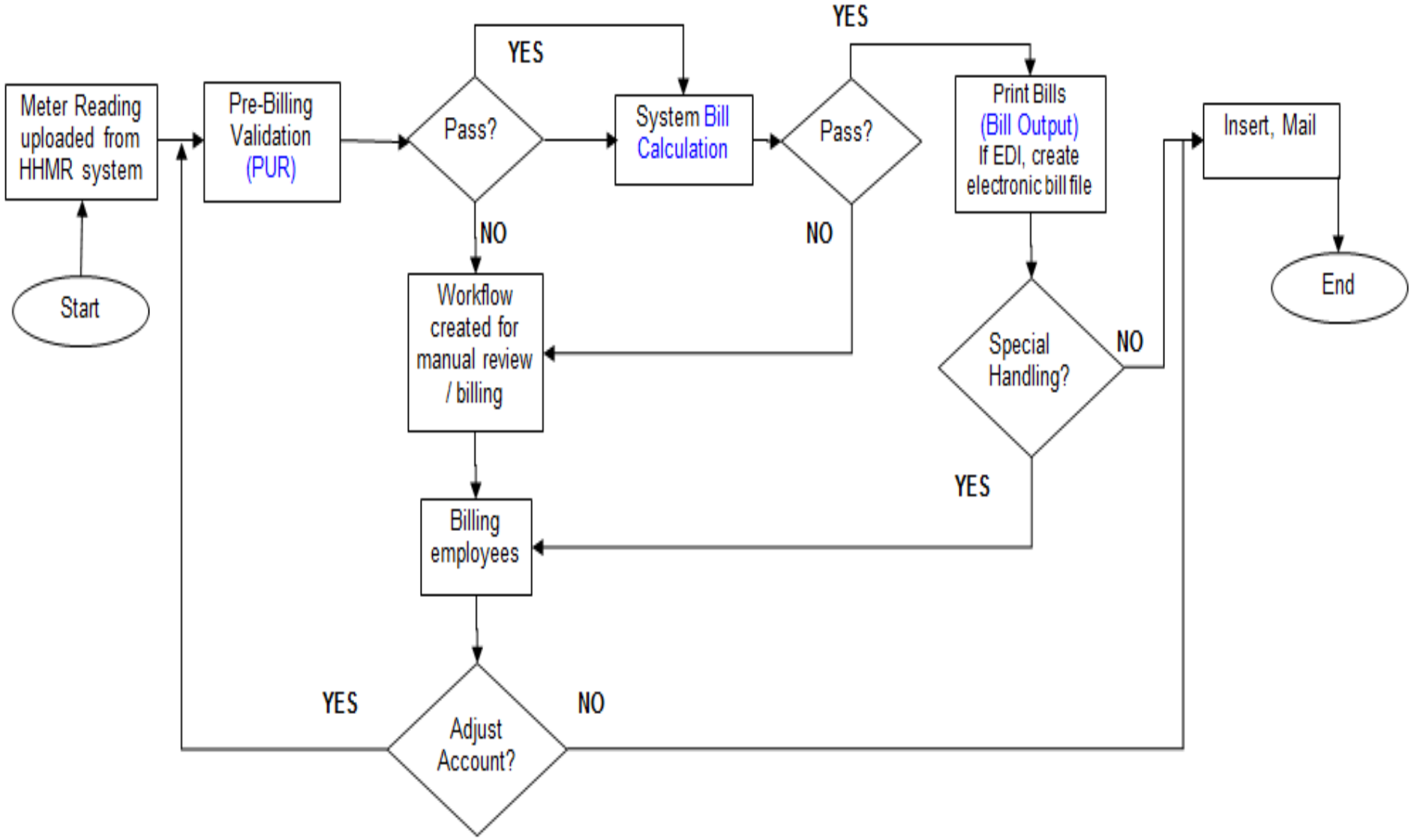
# Billing Validations & Budget

Billy Brumfield

October 1, 2014

# Billing Validations



# Billing Validations – PUR "Nobills"

| | 07 | 10 | Grand |
|---|---|---|---|
| BN-EXCD 75% CAP | 3,640 | 5,365 | 9,005 |
| BN-MTR NO EST | 1,102 | 1,182 | 2,284 |
| BN-LD FACT <1% | 674 | 492 | 1,166 |
| BN-CUR LT PV RD | 449 | 690 | 1,139 |
| BN-EXCDS 600/DY | 229 | 556 | 785 |
| Grand Total | 8,458 | 10,595 | 19,053 |

- Exceeds 75% Capacity (47% of total) = Difference in meter registration reaches 75% of capacity; 7,500 on a four (4) dial meter, 75,000 on a five (5) dial meter (most common), or 750,000 on a six (6) dial meter
- Meter No Estimate (12% of total) = Meter cannot be "system" estimated
- Load Factor <1% (6% of total) = Reading is outside range (More KW than KWH)
- Current less than Previous (6% of total) = Current actual demand (KW) is lower than last months estimated demand
- Exceeds 600 KWH Per Day (4% of total)

# Billing Validations – Bill Calc "Nobills"

- Current Bill is 10 times greater than the highest bill for the past 12 months
- Current Bill is greater than the tariff's maximum amount threshold
- Current Bill is less than $0.00

# Billing Validations – Other Exceptions

- Zero use for two consecutive periods
- Zero use for 6 consecutive months
- No readings received for 6 months or more
- An account in “Active Disconnect” status (credit related) will not bill until it becomes “Active” or “Final.”
- Current Bill is 2 times greater than the highest bill for the past 12 months
- Requested by Office – Someone needs to review the bill before it is mailed

# Billing Validation Questions?

# Budget

- As soon as customer switch is processed, Customer Operations Billing receives a system workflow to review
- All about Timing
- Example: Customer received bill 4/17/14
- Called a Provider and switched 4/24/14
- Switch confirmation effective 5/20/14
- Next Bill 5/19/14
- First Bill with Provider 6/18/14

# Budget Calculation

- The system automatically calculates the budget amount using the following calculation
- = A(daily average of the AEP distribution charges and RS rider {487-1D}) * 30 “+” B(daily average of the account deferred amount) * 30
- Or A * 30 “+” B * 30

# Budget Calculation Example

| Activity Date | # of Days | AEP Bill | EPP Amt | Deferred |
|---|---|---|---|---|
| 9/17/2014 | 30 | 100.00 | 143.00 | 400.00 |
| 8/18/2014 | 31 | 100.00 | 141.00 | 450.00 |
| 7/18/2014 | 30 | 90.00 | 139.00 | 475.00 |
| 6/18/2014 | 30 | 90.00 | 140.00 | 520.00 |
| 5/19/2014 | 32 | 200.00 | 312.00 | 565.00 |
| 4/17/2014 | 30 | 275.00 | 312.00 | 670.00 |
| 3/18/2014 | 28 | 315.00 | 308.00 | 704.00 |
| 2/18/2014 | 30 | 455.00 | 303.00 | 695.00 |
| 1/19/2014 | 33 | 415.00 | 293.00 | 540.00 |
| 12/17/2013 | 33 | 390.00 | 284.00 | 420.00 |
| 11/14/2013 | 29 | 230.00 | 270.00 | 310.00 |
| 10/16/2013 | 29 | 150.00 | 264.00 | 350.00 |

# Budget Calculation Example

- If the Anniversary Date is December 2014
- Then the calculation is:
- 10/16/13 D Charges + 11/14/13 D Charges + 12/17/13 D Charges = $385
- 10/16/13 GRSR + 11/14/13 GRSR + 12/17/13 GRSR = $24
- 10/16/13 # of Days + 11/14/13 # of Days + 12/17/13 # of Days = 91
- A = $385 + $24 / 91
- A = $4.49 per day * 30
- A = $135.00

# Budget Calculation Example

- Now for “B” side
- B = $400.00 / 91
- B = $4.40 * 30
- B = $132.00
- Budget Due = A + B
- Budget Due = $135.00 + $132.00
- Budget Due = $267.00

- What about Average Monthly Payment Plan (AMP)?

# Budget Questions?

# Q & A

# THANKS FOR ATTENDING!

*AEP Ohio Choice Operations*

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