2016 Demand Response End of Year Review

February 2017
EnergyHub is the connected home solution for utilities
Major DRAM successes in 2016

• Robust and diverse third-party participation in DRAM auction
• Third-party integration into the CAISO wholesale market
• High level of interest expressed by residential customers in program participation
Major DRAM challenges in 2016

• Initial delays in launching program
  – CISR form and DRP agreement not ready with sufficient time before program launch

• Significant time lags (with CAISO and IOUs) and inefficient data exchange

• Complex and onerous CISR process
DRAM program customer journey (simplified)

1. Customer receives offer
2. Customer enters information and completes CISR
3. Customer receives acceptance notice
4. Customer dispatched throughout summer
DRAM program customer journey (simplified)

1. Customer receives offer
2. Customer enters information and completes CISR
3. Customer receives acceptance notice (~6 weeks)
4. Customer dispatched throughout summer
DRAM enrollment process

1. **Customer receives offer**
2. **CISR collection/enrollment via docu-sign or click**
3. **DRP sends CISRs and applications to IOU**
4. **IOU provides customer info (rate class, sublap)**
5. **DRP confirms customer eligibility**
6. **Customer receives notice of approval/rejection**
7. **LSE approves each account in CAISO DRRS**
8. **SC registers each account in CAISO DRRS**
9. **CAISO confirms resource registration**
10. **SC registers resource with the CAISO**

Timeframes:
- 2-4 weeks
- ~6 weeks
DRAM program customer journey (simplified)

1. Customer receives offer
2. Customer enters information and completes CISR
3. Customer receives acceptance notice
4. Customer dispatched throughout summer
CISR process problems impair customer experience

- Customers don’t have their account number readily available
- Multiple enrollment steps and clicks create customer fatigue (SCE GBC is 10-12 screens)
- Customers redirected away from DRP site
- Third party e-signature services are difficult to use and very expensive
## What happened to all the customers?

### enrollment steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer receives offer</td>
<td>100%</td>
</tr>
<tr>
<td>Customer engages with offer</td>
<td>~40-60%</td>
</tr>
<tr>
<td>Customer agrees to participate and provides SA number</td>
<td>17%</td>
</tr>
<tr>
<td>Customer signs CISR</td>
<td>9%</td>
</tr>
</tbody>
</table>

### final determination

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepted</td>
<td>5.3%</td>
</tr>
<tr>
<td>Rejected</td>
<td>3.3%</td>
</tr>
<tr>
<td>Rejected CISR</td>
<td>1.1%</td>
</tr>
<tr>
<td>Wrong sublap</td>
<td>0.4%</td>
</tr>
<tr>
<td>Program conflict</td>
<td>1.3%</td>
</tr>
<tr>
<td>Late application</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Customer applications submitted to IOU
Potential improvements discussed in click-through WG with some agreement among parties

- More efficient data exchange between DRP and IOU for customer eligibility and event result meter data
- Reduced number of “clicks”
  - DRP populated date range and SA autofill
  - One check click-through authorization
- Visually clearer and more concise CISR process
  - Maximum of two screens
  - Streamlined language: summary of data elements
- Dual authorization
- Some performance metric reporting
Some important considerations for DRAM 2018-2019

• Elements required for GBC development in addition to effective implementation of those mentioned in previous slide
  – Stage place for testing
  – Mobile capability
  – Alternative authentication credentials
• Customer registrations limits cannot disqualify DRAM customer applications
• Data items must be provided by IOUs free of charge to DRPs
• Streamline and digitize the moving of customers from different programs into and out of DRAM
• All GBC updates need to be finalized by Q3 2017
• Need a pathway to a DRP designed solution
New market opportunity for residential customers

- PG&E proposed residential customers be included in CBP in 2018-2020 DR application
  - Some implementation details need to be ironed out
    - BAWG recommended CAISO baseline
    - Appropriate duration for events
  - Other IOUs should also consider this proposal
- We support SDG&E proposal to create WSL WG to optimize integrating residential AC into the market
- All IOUs propose adding residential to ADR incentives
Appendix
PG&E enrollment flow (customer perspective)

Enter name, address, email
SA ID

Use DocuSign for e-signature;
6 clicks, 2 signatures

Receive notice of acceptance/rejection
SCE enrollment flow (customer perspective)

1. Log into MyAccount and access Data Sharing page
2. Select third party, SA IDs, data types and duration
3. Enter required information on third party site once redirected
4. Receive notice of acceptance/rejection
5. Complete authorization once redirected back to SCE