Smart Renewable Energy Programs
Smart Distributed Energy Resources (Smart DER) & Bring Your Own Device (BYOD)

February 15, 2024
Why are we doing this?

- Simplify and streamline customer options
- Increase renewable energy integration into the grid
- Improve grid resilience through grid services
- Leverage data and technology from advanced meters
- Encourage customers to Shift & Save
- Develop long-term equitable pricing and stabilize costs for all

End Goal:
Support the state’s decarbonization goal by incentivizing customer generated renewable energy
What is happening and when? *(subject to change)*

**March 1, 2024**: New Programs Launch  
Smart DER (Export and Non-Export)  
BYOD (Level 1 ONLY)\(^1\)

**March 31, 2024**: Interim Programs Close\(^2\)  
Interim Export: CGS, CGS+, Smart Export  
Interim Non-Export: CSS, SIA

**June 30, 2024**: Battery Bonus Closes (Maui)

**September 1, 2024**: Transition Begins  
Interim export program (CGS, CGS+, Smart Export) automatic transitions 7 years after underlying interconnection agreement execution date

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\(^1\) BYOD Level 2 & 3 temporarily suspended per Order No. 40582 filed on February 5, 2024 p18

\(^2\) Program Closure means last day for NEW applications (and Amendments for program size increases larger than 1kW on Oahu/Maui County or 100W on Hawaii Island); any application received on or before March 31 will be allowed to remain on the interim program (for 7 years for CGS+/Smart Export)
Who will this impact?

- **Primary impact:**
  - Residential and Commercial customers interested in solar
  - Existing interim export customers (CGS, CGS+, Smart Export)

- **Will NOT impact:**
  - NEM/NEM+ customers
  - Existing interim non-export customers (CSS, SIA)
What are the programs today?

**Interim Programs**

- **Export**
  - Customer Grid Supply (CGS)
  - Customer Grid Supply Plus (CGS+)
  - Smart Export
- **Non-Export**
  - Customer Self Supply (CSS)
  - Standard Interconnection Agreement (SIA)
- **Battery Add-On**
  - Battery Bonus (SDP)
- **Legacy Export**
  - Net Energy Metering (NEM/NEM+)
What are the new long-term programs?

New Programs

- Smart DER Export (SDE)
- Smart DER Non-Export (SDN)
- Bring Your Own Device (BYOD)
How will current customers be affected?

- **Interim Programs**
  - **Export**
    - Customer Grid Supply (CGS)
    - Customer Grid Supply Plus (CGS+)
    - Smart Export
    - **Automatic transition** 7 years after underlying interconnection agreement date
  - **Non-Export**
    - Customer Self Supply (CSS)
    - Standard Interconnection Agreement (SIA)
    - **Option to transition**
  - **Battery Add-On**
    - Battery Bonus (SDP)
    - **Option to transition**
  - **Legacy Export**
    - Net Energy Metering (NEM/NEM+)
    - **No required transition**; opt-in available to Smart DER and/or BYOD

- **New Programs**
  - Smart DER Export (SDE)
  - Smart DER Non-Export (SDN)
  - Bring Your Own Device (BYOD)

**Notes**:
- Automatic transition = no action is required by the customer to change programs
- Option to transition = a customer may transition by submitting a webform on Hawaiian Electric’s website (after March 1)
- All other program changes (i.e. SIA to SDE, or CGS to SDN) will require a withdrawal from current program and a new application submittal
What are the customer benefits & incentives?

<table>
<thead>
<tr>
<th></th>
<th>Smart DER Non-Export</th>
<th>Smart DER Export</th>
<th>BYOD Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bill savings from load reduction</strong></td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td><strong>Bill credits for exported energy</strong></td>
<td>$ (varies by island and time period)</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td><strong>Upfront cash incentive</strong></td>
<td>($100/committed kW up to $500; LMI adder available)</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td><strong>Additional monthly incentive for battery dispatch</strong></td>
<td>($5/committed kW)</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES on export rate:**
- SDE Tariff rate subject to change every three (3) years
- Customer SDE rate “locked in” for seven (7) years when contract is executed, then will automatically adjust with the tariff rate every three (3) years
- If the rate changes after their contract is executed, a customer may choose a more favorable rate, but will not be able to switch back to original “locked in” rate
# What are the eligibility requirements?

<table>
<thead>
<tr>
<th></th>
<th>Smart DER Non-Export</th>
<th>Smart DER Export</th>
<th>BYOD Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Size Limit</strong></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No size cap¹</td>
<td></td>
</tr>
<tr>
<td><strong>Shift &amp; Save (TOU)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opt-out available²</td>
<td></td>
</tr>
<tr>
<td><strong>Meter Type</strong></td>
<td></td>
<td>Advanced meter³</td>
<td></td>
</tr>
<tr>
<td><strong>Program Capacity</strong></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Varies by island</td>
<td></td>
</tr>
<tr>
<td><strong>Other Program Participation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cannot participate in another interconnection program (i.e. NEM, CBRE, etc.)</td>
<td>Must participate in an interim program or Smart DER; Cannot participate in an existing Demand Response program (i.e. Swell)</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td>Any</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Renewable generation</td>
<td>Energy storage paired with renewable generation</td>
</tr>
<tr>
<td><strong>Export Commitment</strong></td>
<td></td>
<td>No exports allowed</td>
<td>Exports may be curtailed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Daily 2-hour battery dispatch</td>
<td></td>
</tr>
</tbody>
</table>

¹ Must follow Rule 14 interconnection requirements
² Opt-out available after one full billing cycle
³ Advanced meter type will vary depending on availability and program needs
What is Shift and Save?

- 1 year Time-of-Use (TOU) **pilot study** started on February 1 to collect data and customer feedback.

- Goal is to see if customers will respond to **pricing signals to shift energy** usage to a less expensive period of the day.

- **4% of randomly selected customers** on Oahu and Hawaii Island included.

- **Bill protection available** for first 6 months:
  - $10 cap on monthly bill for Residential
  - 4% cap on monthly bill for Commercial

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Shift and Save website
Where can customers go for more info?

- **Website:**
  [hawaiianelectric.com/renewableprograms](http://hawaiianelectric.com/renewableprograms)

- **Email:**
  [connect@hawaiianelectric.com](mailto:connect@hawaiianelectric.com)

- **Phone:**
  808-543-4760
Questions?
<table>
<thead>
<tr>
<th>Island</th>
<th>Daytime (9am – 5pm)</th>
<th>Evening Peak (5pm – 9pm)</th>
<th>Overnight (9pm – 9am)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>$0.135</td>
<td>$0.329</td>
<td>$0.189</td>
</tr>
<tr>
<td>Hawaii Island</td>
<td>$0.106</td>
<td>$0.231</td>
<td>$0.148</td>
</tr>
<tr>
<td>Maui</td>
<td>$0.066</td>
<td>$0.182</td>
<td>$0.131</td>
</tr>
<tr>
<td>Lanai</td>
<td>$0.267</td>
<td>$0.408</td>
<td>$0.259</td>
</tr>
<tr>
<td>Molokai</td>
<td>$0.179</td>
<td>$0.272</td>
<td>$0.174</td>
</tr>
</tbody>
</table>
What are the BYOD program capacities?

<table>
<thead>
<tr>
<th>Island</th>
<th>BYOD Level 1</th>
<th>BYOD Level 2</th>
<th>BYOD Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>10 MW</td>
<td>20 MW</td>
<td>40 MW</td>
</tr>
<tr>
<td>Hawaii</td>
<td>2 MW</td>
<td>5 MW</td>
<td>10 MW</td>
</tr>
<tr>
<td>Maui</td>
<td>2 MW</td>
<td>5 MW</td>
<td>10 MW</td>
</tr>
<tr>
<td>Lanai</td>
<td>200 kW</td>
<td>500 kW</td>
<td>750 kW</td>
</tr>
<tr>
<td>Molokai</td>
<td>200 kW</td>
<td>500 kW</td>
<td>750 kW</td>
</tr>
</tbody>
</table>
If I want to transition / opt in early what do I need to do?
• Webform will be available on www.hawaiianelectric.com/renewableprograms starting March 1

Can I add to or amend my existing system (CGS, CGS+, ISE, CSS) after March 31?
• Yes, you are allowed to amend your existing system but you will be unable to increase your system size by more than 1kW on Oahu/Maui County or 100W on Hawaii Island after March 31

Why would someone switch from Battery Bonus to BYOD?
• Due to current incentive rates this will likely not happen in the near future; a Battery Bonus customer may switch to BYOD Level 3 (when available) towards the end of their 10-year commitment (monthly incentive is $10/kW instead of $5/kW)
Internal Questions: BYOD

- If I want to apply to BYOD, do I need to install a new battery?
  - Yes, you would need to install a new battery

- Are Maui customers able to apply to Battery Bonus with Smart DER?
  - Yes; Battery Bonus applications will need to be submitted as an Amendment in CIT (same way it is done today)

- How is the LMI designation for additional bonus on the programs going to be determined?
  - LIHEAP flag; pending PUC approval
FAQs by Customer Type

- **NEM customer:** What if I am a NEM customer?
  - The NEM program remains unchanged so no action or changes are relevant for you; you may still add non-export PV through NEM+ and you may apply to BYOD (if you are not already on Battery Bonus).

- **Customer without solar:** What program is best for me?
  - We recommend finding a qualified contractor to assist you but if you are a typical residential customer, the Smart DER Export program is likely the best option so you can have the opportunity to receive bill credits, but you will be encouraged to “Shift & Save” as much as possible to receive the maximum benefit. If you are also looking into purchasing a battery, then the BYOD program may provide additional benefits if you can commit to the dispatch requirements.

- **Customer in process of getting solar:** I’m working with a solar contractor now. What does this mean for me?
  - As long as your contractor submits your application by March 31, 2024 you will be eligible for the CGS+ or Smart Export rates when your system is turned on. You will have 7 years from your contract execution date until your rates will be automatically updated to TOU and SDE.

- **Existing PV customer:** Should I switch to Smart DER?
  - It depends on your usage, PV system size, whether or not you have a battery, and how much you can Shift & Save; recommend working with your solar contractor to make best determination based on your individual load profile.
General FAQs

- **How do I know what solar program I am on?**
  - If you’ve had solar for a while, you can most likely find your solar program on your bill (either NEM, CGS, CGS+, CSS, or ISE for Smart Export). If you’ve recently gotten solar or you are unsure, please call Hawaiian Electric’s Customer Care line.

- **How does TOU work with Smart DER Export?**
  - You will be charged TOU rates for any energy received from the grid within each time periods (Daytime, Evening, Overnight). If you have any excess energy exported to the grid, you will receive bill credits at the Smart DER Export rates within each time period (Daytime, Evening, Overnight).
  - **For NEM customers:** If you opt-in to TOU, you will receive bill credits at the TOU retail rates within each time period.

- **Is TOU and advanced meters required to participate in the new rooftop solar programs?**
  - Yes, because the goal is to utilize the latest grid technology to allow the most renewable energy onto our grid to meet the state’s decarbonization goals.
What are the rates for Maui? [EXAMPLE]

For reference:

- Jan 2024 effective rate is $0.38/kWh
- Existing bill credits:
  - NEM: Retail
  - CGS: $0.17/kWh
  - CGS+: $0.12/kWh
  - Smart Export: $0.14/kWh (only 4pm-9am)
What are the rates for Oahu?

**Smart DER Export**
Residential Rates ($/kWh) - Oahu

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Daytime</th>
<th>Evening Peak</th>
<th>Overnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>$0.17</td>
<td>$0.33</td>
<td>$0.35</td>
</tr>
</tbody>
</table>

For reference:

- Jan 2024 effective rate is $0.39/kWh
- Existing bill credits:
  - NEM: Retail
  - CGS: $0.10/kWh
  - CGS+: $0.15/kWh
  - Smart Export: $0.15/kWh (only 4pm-9am)
TOU and Smart DER Export Rate: Hawaii Island

Hawaii Island Schedule R

<table>
<thead>
<tr>
<th>Time Period</th>
<th>TOU Rate</th>
<th>Smart DER Export Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9am – 5pm) Daytime</td>
<td>$0.21</td>
<td>$0.11</td>
</tr>
<tr>
<td>(5pm – 9pm) Evening Peak</td>
<td>$0.62</td>
<td>$0.23</td>
</tr>
<tr>
<td>(9pm – 9am) Overnight</td>
<td>$0.41</td>
<td>$0.15</td>
</tr>
</tbody>
</table>
TOU and Smart DER Export Rate: Lanai

Lanai Schedule R

Daytime (9am – 5pm) $0.26
Evening Peak (5pm – 9pm) $0.78
Overnight (9pm – 9am) $0.52

TOU rate
Smart DER export credit
### Molokai Schedule R

<table>
<thead>
<tr>
<th>Time Period</th>
<th>TOU Rate</th>
<th>Smart DER Export Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9am – 5pm)</td>
<td>$0.66</td>
<td>$0.22</td>
</tr>
<tr>
<td>(5pm – 9pm)</td>
<td>$0.27</td>
<td>$0.18</td>
</tr>
<tr>
<td>(9pm – 9am)</td>
<td>$0.44</td>
<td>$0.17</td>
</tr>
</tbody>
</table>

**Daytime**

- **5pm – 9pm:** Evening Peak
- **9pm – 9am:** Overnight

**TOU and Smart DER Export Rate:** Molokai