<table>
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<tr>
<th><strong>DOCKETED</strong></th>
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<tr>
<td>Docket Number: 21-IEPR-06</td>
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<tr>
<td>Project Title: Building Decarbonization and Energy Efficiency</td>
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<tr>
<td>TN #: 239971</td>
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<tr>
<td>Document Title: Presentation - Load Flexibility Programs and Policies</td>
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<tr>
<td>Description: S2.3B Gabriel Taylor, CEC</td>
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<tr>
<td>Filer: Raquel Kravitz</td>
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<tr>
<td>Organization: California Energy Commission</td>
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<tr>
<td>Submitter Role: Commission Staff</td>
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<td>Submission Date: 10/4/2021 3:31:34 PM</td>
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<td>Docketed Date: 10/4/2021</td>
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Building Energy Efficiency Standards

2019 Standards
• Solar or Solar Readiness
• Demand Management
• Heat Pump Water Heaters Options

2022 Standards
• Electric Readiness
• Solar and Battery Standards
• Additional Electric Space & Water Heating Options
• Controlled Receptacles
Appliance Efficiency Standards

- Central Air Conditioners
- Central Heat Pumps
- Computers
- Cooking and Washing Products
- Electronics
- Fans and Dehumidifiers
- Heating Products
- Landscape Irrigation Equipment
- Lighting Products
- Motor Products
- Noncentral Air Conditioners and Heat Pumps
- Plumbing Products
- Pool Products
- Refrigeration Products
- Transformer Products
- Water Heater Products
Flexible Demand Appliance Standards (FDAS)

- **Initial Staff Workshop** in December 2020
- **Request for Information (RFI)** due date extended to Monday, November 1

- **Phase 1**: Thermostats, Pool Pump Controls, Dishwashers, and Electric Clothes Dryers
- **Phase 2**: Electric Water Heaters, and Behind the Meter Batteries
- **Phase 3**: Electric Vehicle Supply Equipment (EVSE)
Load Management Standards

...a program of electrical load management for each utility...

- Energy Storage
- Automation
- Rates (recommendations)
Market Informed Demand Automation Server (MIDAS)

MIDAS Rate Database

Example Rate in XML

```xml
<API.Url/>
<EndUse>Electric Vehicle</EndUse>
-<PriceInformation>
  -<PriceData>
    <DateEnd>2021-09-30</DateEnd>
    <DateStart>2021-06-01</DateStart>
    <DayEnd>Holiday</DayEnd>
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    <PriceName>Summer Peak</PriceName>
    <TimeEnd>20:59</TimeEnd>
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  <DayStart>Monday</DayStart>
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Rate Identification Number (RIN)

USCA-PGPG-TOU4-0000000000

- State
- Energy
- Location
Vehicle-Grid Integration (VGI)

- California Vehicle-Grid Integration Roadmap
- Grid Impact Analysis Modeling

- Electric Vehicle Supply Equipment (EVSE) Deployment and Grid Evaluation (EDGE) Tool
- Megawatt Charging System
- Research funding consultation
- Cross-divisional and interagency coordination
The California Load Flexibility Research and Development Hub (CalFlexHub) aims to advance the capability of buildings to provide flexible electricity load.

- Identify, evaluate, develop, and demonstrate load-flexible pre-commercial technologies
- Standardize the signals used to communicate dynamic price and GHG information
- Load Shaping focus, but will also evaluate Supply Side