



API v2 Overview

API v2 Highlights

v2.0









- Name changes:
 - Accounts --> Authorizations
 - Services --> Meters
- Normalized Data via Blocks
- Forms and Templates
- Form Tracking and Filtering
- Demos and Testing
- Defined Notes
- Multi-Meter Activation
- Archiving and Filtering

v2.1




- Ongoing Monitoring
- Webhooks
- Labeling

API v2 Highlights

v2.0

- Name changes:  Fixes confusing API nomenclature
 - Accounts --> Authorizations
 - Services --> Meters
- Normalized Data via Blocks  Fixes confusing meter and bill data formats
- Forms and Templates  Fixes confusing authorization portal integration
- Form Tracking and Filtering  Fixes customer authorization tracking and status
- Demos and Testing  Fixes testing multiple utilities and bill datasets
- Defined Notes  Fixes messaging around data availability
- Multi-Meter Activation  Fixes multiple requests to activate data collection
- Archiving and Filtering  Fixes clearing out old authorizations and meters

v2.1

- Ongoing Monitoring  Fixes need to manually refresh data
- Webhooks  Fixes need to poll the API to get updates
- Labeling  Fixes organizing authorizations and meters

Fixes

API v2 Endpoints

Endpoint	Description
<code>/templates</code>	Authorization form templates (similar to v1 Widget Tokens)
<code>/forms</code>	Prefillable authorization forms (new!)
<code>/authorizations</code>	Submitted authorizations (similar to v1 Accounts)
<code>/meters</code>	Utility meters and services (similar to v1 Services)
<code>/bills</code>	Utility bills (uses Utility Data Building Blocks)
<code>/intervals</code>	Utility intervals (uses Utility Data Building Blocks)

Quick Example

1. Create an authorization form

```
POST /api/v2/forms
```

2. Mock submitting the form for demo account (returns a referral token)

```
POST /api/v2/forms/{form_uid}/test-submit
```

3. Get the authorization and meters

```
GET /api/v2/authorizations?referrals={referral_token}&include=meters
```

4. Activate the meters to collect data

```
POST /api/v2/meters/historical-collection
```

5. Download bills

```
GET /api/v2/bills?meters={meter_uid}
```

API v2 Testing and Example Data

Dedicated testing endpoint to allow utility-specific testing and error scenarios.

```
# PG&E residential dataset
curl -X POST \
  -H 'Authorization: ACCESS_TOKEN' \
  -d '{"utility": "PG&E", "type": "residential"}' \
  'https://utilityapi.com/api/v2/forms/123/test-submit'

# SCE bad login during activation scenario
curl -X POST \
  -H 'Authorization: ACCESS_TOKEN' \
  -d '{"utility": "SCE", "type": "badlogin_after_activation"}' \
  'https://utilityapi.com/api/v2/forms/123/test-submit'
```

Also, published list of known tariffs and block values for each utility in docs.

Clear Messaging

Documented informational notes on authorization and data collection results.

```
// Authorization Notes
{
  ...
  "status": "errored",
  "notes": [
    // breakdown of error reasons
    {"type": "access_valid", ...},
    {"type": "utility_down", ...},
    ...
  ],
  ...
}
```

```
// Meter Notes
{
  ...
  "status": "updated",
  "notes": [
    // includes extra fields on why
    {"type": "bills_full", ...},
    {"type": "intervals_partial", ...},
    ...
  ],
  ...
}
```

Normalized Data via Utility Data Building Blocks

- Simple, extensible way of formatting utility data
- Objects are made of structured data blocks
- Easy and fast to get started
- Powerful for advanced analysis
- Only build support for the blocks you need
- Universal and utility-specific blocks
- Each block type is documented with examples

```
{  
  "uid": "12345-6",  
  "blocks": [  
    "base",  
    ...  
  ]  
  "base": {...},  
  ...  
}
```


Example Bill Data

```
{
  "uid": "abc123"
  "blocks": [
    "base",           //basic bill info
    "tiers",         //tier breakdown
    "pge_nem"        //NEM details
  ],

  // base universal block
  "base": {
    "service_identifier": "3-555-4444",
    "tariff": "E1",
    "total_cost": 100.11,
    ...
  },
```

```
    // tiers universal block
    "tiers": [
      {"name": "Summer Tier 1", ...},
      {"name": "Summer Tier 2", ...},
      ...
    ],

    // utility-specific PG&E block
    "pge_nem": {
      "tracked_kwh": 123.49,
      ...
    }
  }
}
```



API v2 Overview