FERC Formula Rate Overview

EEI Spring Accounting Conference
May 22, 2018
Agenda

• Background
  o What is FERC Formula Rate?
  o SCE’s FERC Formula Rate History

• FERC Formula Rate Protocol
  o FERC Proceeding
  o Timeline and Effective Dates
  o Anatomy of FERC Formula

• Accounting for FERC Formula Rate
  o Accounting Recording
  o Accounting True-up

• Q&A?
Polling Question#1

Does your company currently use FERC Formula?

a) Yes
b) No
c) No, but contemplating implementation soon
d) I have no idea
**Background : What is FERC Formula Rate?**

- **FERC Formula Rate** is a rate setting method in which a utility sets its transmission revenue requirement (TRR) and rates to recover the costs of owning and operating transmission facilities under FERC jurisdiction (ISO control) using a set formula.

- The formula rate is a “blank template” that calculates the rate according to a set formula in compliance with FERC approved formula protocols.

- Each year, the transmission owner populates the formula template with recorded and forecasted numbers to arrive at the amount it is permitted to charge to customer for a rate year (Annual Update Filing).

- The formula will true-up the revenues received in rate year to actual costs incurred in that year.
Background: SCE’s FERC Formula Rate History

- **Introduction of FERC Formula Rate (2012)**
  - Initial FERC Formula Rate (TO6) filed June 2011
    (effective 1/1/2012 – 12/31/2017)

- **Successor FERC Formula Rate Mechanism for 2018**
  - Successor FERC Formula Rate (TO2018) filed October 2017
    (effective 1/1/2018)
  - FERC accepted the filing effective January 1, 2018, subject to refund and settlement/hearing procedures.
Background: SCE’s FERC Formula Rate History

Why change from stated rate cases to FERC Formula Rate?

- Increasing transmission investment growth and flat sales growth.
- Annual stated rate cases were labor-intensive, contentious, and untimely.
- The use of a FERC formula rate ensures rates reflect the actual costs of service compared to stated rate cases based on forecasts.
- Once set, formula rate has been less contentious and reduced litigation costs.
- Allow customer to gain any cost efficiencies that the utility may develop.
FERC Formula Rate Protocol: FERC Proceeding

Initial/Replacement Rate Filing

- FERC Formula Rate Filed
- Public Notice
- Interventions/Protests
- Hearing Order (If Commission orders a hearing)
- Settlement Judge Procedures (Commission typically suspends hearing to first attempt settlement)

Settlement Reached ↔ Settlement Fails Hearing Commences
FERC Formula Rate Protocol: FERC Proceeding

- FERC formula rate setting proceedings can be lengthy and controversial as each party’s interpretation of cost of service precedents maybe different.

- Examples of potential controversies in formula setting:
  - ROE Calculation – FERC’s current methodology of calculating ROE gives disparate results depending on the group of companies to which it is applied. (EEI has launched an initiative to request that FERC considers other models and approaches)
  - Risk Rating – a company’s risk profile affects the ROE that is authorized to provide a fair/reasonable return to investors.
  - FERC Costs Allocation methodology – for companies that own and operate more than just transmission facilities, FERC FORM-1 costs is not 100% ISO.
FERC Formula Rate Protocol: Timeline and Effective Dates

- Annual Update Filing: Draft Annual Update posted on SCE’s website by June 15.

- Discovery and Review Period from June 15 thru November 1 (typically data requests/questions from customers or intervenors during this period).

- Final Annual Update filed by December 1, to be effective in rates on January 1 of following year.
Polling Question#2

What is your role in FERC Formula Rate

a) Expert overseeing FERC Formula Rate Model
b) Accounting professional recording the journal entry
c) I provide certain input to FERC Formula
d) Not Applicable or I am not sure
FERC Formula Rate Protocol: Anatomy of Formula

- **FERC Formula Rate Design** uses prior year recorded data as proxy of forecast spend plus adjustment for forecast capital additions and true-up of prior year under/over collection to set future transmission revenue requirement (TRR) and rates based on a set formula.

- **TRR** is based on a cost-of-service formula

<table>
<thead>
<tr>
<th>Component</th>
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<tbody>
<tr>
<td>Operation &amp; Maintenance Expenses (O&amp;M)</td>
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<tr>
<td>+ Administrative and General Expenses (A&amp;G)</td>
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<tr>
<td>+ Depreciation Expense</td>
</tr>
<tr>
<td>+ Taxes Other Than Income</td>
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<td>+ Return on Investment (Rate Base x Overall Rate of Return)</td>
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<td>+ Income Taxes</td>
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<td>- Revenue Credits</td>
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  = **Total Cost of Service (TRR)**
TRR = Prior Year TRR + IFPTRR + True Up Adjustment

1) Prior Year TRR: Full TRR calculation based on last recorded calendar year data

2) IFPTRR: Incremental Forecast Period TRR based on forecasted plant & CWIP additions during the rate period multiplied by fixed charge rate (TRR per $1 of plant or CWIP addition)

3) True-Up Adjustment: Adjustment of prior calendar year’s actual revenues (projected rates x load) to actual costs
**FERC Formula Rate Protocol: Anatomy of Formula (Cont.)**

<table>
<thead>
<tr>
<th>TO2018</th>
<th>Effective in Rates</th>
<th>Recorded Costs (PY TRR)</th>
<th>Forecasted Costs (IFPTRR)</th>
<th>True-Up Adjustment</th>
</tr>
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<tbody>
<tr>
<td>Initial Rate Filing</td>
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<td>Annual Update Filing</td>
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**2018 Rates (TO2018) billed to customer**

**Projected 2018 Costs**

**True-Up for 2016 Under/Over Collection**

**FERC FORM 1 for 2018 Filed by April 2019**

**Ratemaking True-Up**

In year 2019, Annual Update Filing for 2020 Rates (Draft by 6/15/2019, Final by 12/1/2019) trues up 2018 over/under collection
Accounting for FERC Formula Rate: Accounting Recording

- On a monthly basis, Accounting populates the formula template with the actual costs of the rate year.

- The difference between the actual monthly revenue (e.g. projected rates in TO2018 x load) and actual monthly costs is recorded as an over/under collection through “FERC Formula Balancing Account” or “Tracker” mechanism.
Accounting for FERC Formula Rate: Accounting True-Up

Accounting True-Up for TO 2018 usually happens in two stages:

1. During calendar year 2018, the difference between the actual monthly revenue and actual monthly costs is trued-up through monthly recording of JE to a tracker mechanism.

2. One time true up in year 2019 to reconcile the recorded actual 2018 costs allocated to ISO to the 2018 FERC Form-1 cost allocated to ISO in the Annual Update Filing (TO2020).

Reasons for the accounting true up:

- Difference between Projected Costs vs. Actual Costs for the rate year
- Post-close FERC topside journal entries
- True-up of allocated FERC ISO costs
Thank you!

Q &A ?
Appendix

Illustration of calculation of TRR, JE on T-Account, and Financial Statement Presentation

1. $885
2. $215
3. $(115)
4. $985

PY TRR + IFPTRR + True-up Adj. = 2018 TRR (projected rates 1/1/18-12/31/18)

1. 2016 Actual ($)
   - O&M 100
   - A&G 50
   - Depreciation Expense 200
   - Taxes Other Than Income 60
   - Return on Investment 30
   + (Rate Base x Overall Rate of Return) 400
   + Income Taxes 120
   - Revenue Credits (45)
   = Total Cost of Service (TRR) 885

2. 2018 Forecast $:
   - Forecast Plant x Annual Fixed Charge 100
   + Forecast CWIP x Annual Fixed Charge 115
   IFPTRR 215

3. 2016 Billed Revenue
   (2016 Forecast TRR Rates x Actual Load) (1,000)
   + 2016 TRR (based on 2016 actuals) 885
   True-up Adjustment (115)
### Assumptions:
2018 forecast load is the same as the actual load and 2018 actual costs equates to the 2018 FERC FORM-1.

#### Projected Cost for Rate Year

<table>
<thead>
<tr>
<th>TO 2018 Projected Rates</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY TRR - Recorded Costs 2016</td>
<td>885</td>
<td>xxx</td>
<td>1,000</td>
</tr>
<tr>
<td>IFPTRR-Inc. Forecasted Costs 2018</td>
<td>215</td>
<td>x</td>
<td>100</td>
</tr>
<tr>
<td>True-Up Adjustment 2016</td>
<td>(115)</td>
<td>x</td>
<td>55</td>
</tr>
<tr>
<td>Effective in Rates</td>
<td>985</td>
<td>xxx</td>
<td>1,155</td>
</tr>
</tbody>
</table>

#### Accounting Recording

<table>
<thead>
<tr>
<th></th>
<th>Rate Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting TRR for the rate year</td>
<td>1,040</td>
<td>.</td>
<td>1,100</td>
<td></td>
</tr>
<tr>
<td>FERC Balancing account provision</td>
<td>55</td>
<td>.</td>
<td>(55)</td>
<td></td>
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</tbody>
</table>

#### Journal Entries for 2018

1. **Journal Entry**
   - Dr. Receivable (B/S) $985
   - Cr. Billed Revenue (P&L) ($985)

2. **Journal Entry**
   - Dr. Reg. Asset (B/S) $55
   - Cr. Provision (P&L) ($55)

#### Journal Entries for 2020

3. **Journal Entry**
   - Dr. Receivable (B/S) $1,155
   - Cr. Billed Revenue (P&L) ($1,155)

4. **Journal Entry**
   - Cr. Reg. Asset (B/S) ($55)
   - Dr. Provision (P&L) $55
Appendix

FYE 2018

Journal Entry
Dr. Reg. Asset (B/S) $55
Cr. Provision (P&L) ($55)

FERC Formula Rate - Asset (Liability)
Debit (Credit )

Jounal Entry
Dr. Receivable (B/S) $985
Cr. Billed Revenue (P&L) ($985)

(985)

2018 Billed Revenue (TO2018 Forecasted Rates x Load)

2018 Accounting TRR 1,040

Under collection

Ending Balance 55

Prior Year TRR

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<tr>
<th>Description</th>
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<td>(Rate Base x Overall Rate of Return)</td>
<td>400</td>
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<tr>
<td>Income Taxes</td>
<td>120</td>
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<td>Revenue Credits</td>
<td>(55)</td>
</tr>
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<td><strong>= Total Cost of Service (TRR)</strong></td>
<td><strong>885</strong></td>
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2018 Forecast $

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