



# Transmission Program Impact on High Voltage TAC *Estimating Model – 2018-2019 TPP Version*

*Stakeholder Overview*  
May 17, 2019

# Background

- Forecasting tool developed for the 2012-2013 Transmission Plan in response to concerns over increasing upward pressure on transmission costs.
  - Replacing aging infrastructure
  - Complying with NERC planning standards
  - Meeting California energy policy goals
- Goal is to estimate future high voltage transmission access costs in an objective and transparent manner.
  - Strike a balance of top down estimates with bottom up details
  - Provides transparency to costs related to reliability, policy, and economic driven projects
  - Establish a baseline and allows the flexibility to customize each future project individually
  - Is not a precise forecast of any individual PTO's revenue requirement or any individual project's revenue requirement

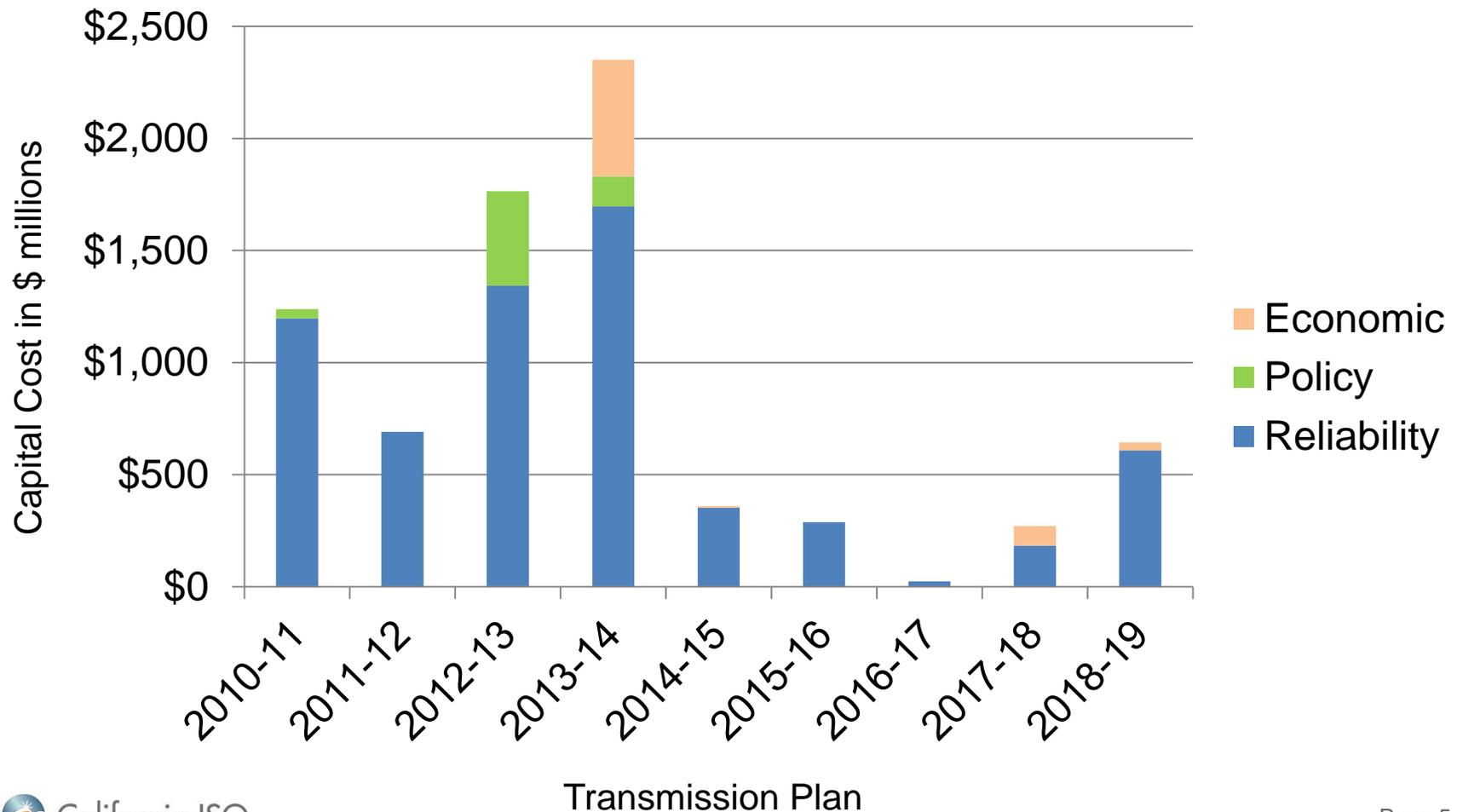
## The Forecasting Tool has been updated by:

1. Reviewing comments received on last year's model
2. Establishing a Solid Foundation – January 1, 2019
  - The model reflects current gross plant data
  - Uses reasonable assumptions for costs associated with non-ISO capital and O&M
  - Includes other important factors such as depreciation, taxes, and capital costs
3. Adding the Costs of Forecast Capital Additions
  - Costs of Capital
  - Treatment of Construction Work in Progress
  - Financing and Tax Structure
  - Estimated Incremental O&M

## Model and modeling assumptions essentially unchanged from previous years:

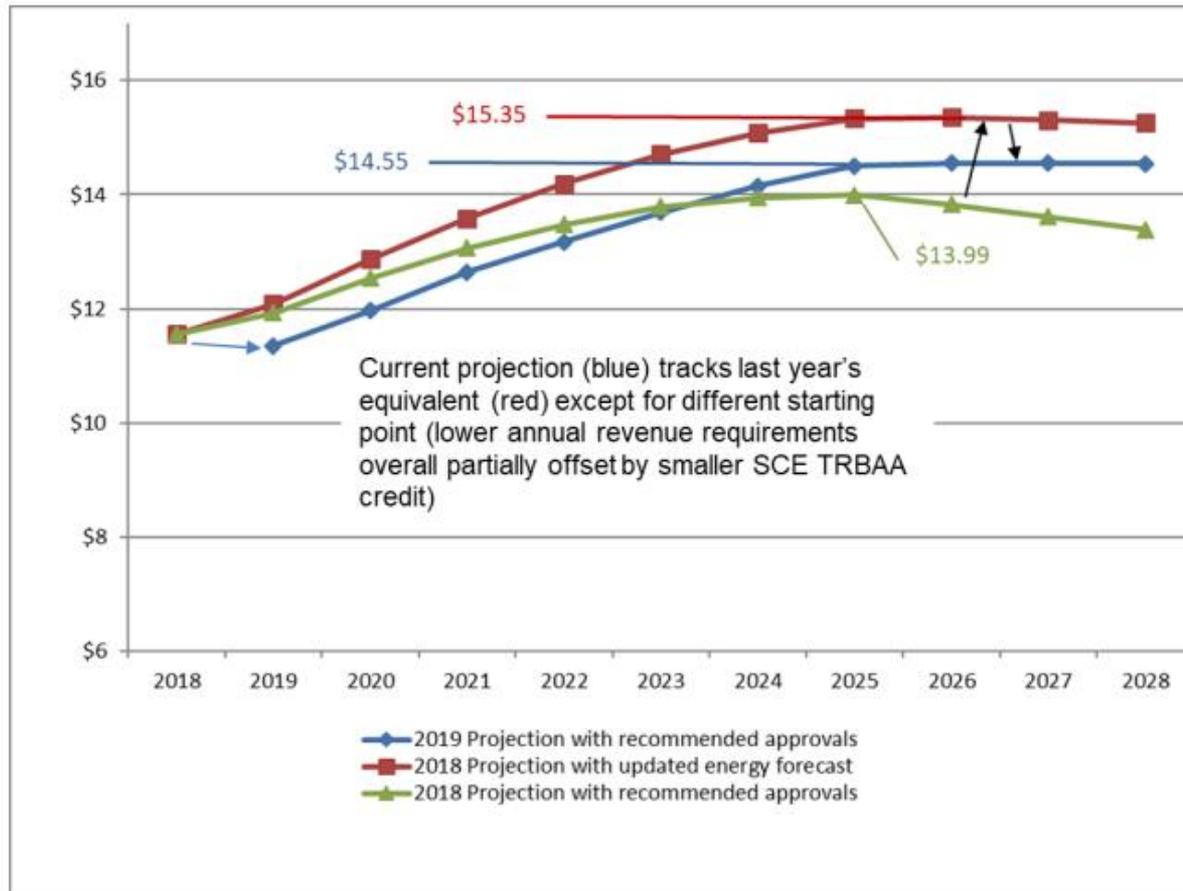
- O&M costs escalated at 2% per year.
- Non-ISO capital estimated at 2% of gross plant per year
- Only major GIP-driven network projects have been identified.
- No adjustment made (yet) for other GIP-driven network upgrades or future ADNUs.
- “Typical” return and depreciation rates applied.

# A modest increase in capital was approved in the 2018-2019 plan relative to the four previous years:



# Regional high voltage transmission access charge projection trended from January 1, 2019 values:

Regional High Voltage TAC \$/MWh



\* Existing returns are maintained for existing PTO rate base, and 11% return on equity is assumed for new transmission capital.

## Compared to the 2017-2018 model, the results themselves denoted:

- No material change in modeling practices except for the updated Federal tax rates.
- 2019 TAC value from 2019 projections is lower than 2018 projections. It is primarily attributable to :
  - Lower TRR for IOUs as compared to 2018
- TAC projection trend similar to last years projection. New Approved projects offset canceled projects to some extent

## Next Steps

- Continue to refine assumptions and costs based on comments received for use in the 2019-2020 transmission plan
- Provide incremental annual updates as part of the annual transmission planning process
- Stakeholder comments on the model are due June 3, 2019 to [regionaltransmission@caiso.com](mailto:regionaltransmission@caiso.com)