# DOCKETED

| | |
|---|---|
| **Docket Number:** | 16-BSTD-06 |
| **Project Title:** | Updates to the 2019 Time Dependent Valuation of Energy |
| **TN #:** | 211725 |
| **Document Title:** | SoCalGas Comments on Time Dependent Valuation of Energy in the Pre-Rulemaking of the 2019 California Building Energy Efficienc |
| **Description:** | N/A |
| **Filer:** | System |
| **Organization:** | SoCalGas/Marc Esser on behalf of Sue Kristjansson |
| **Submitter Role:** | Applicant Consultant |
| **Submission Date:** | 6/6/2016 8:02:35 AM |
| **Docketed Date:** | 6/6/2016 |

*Comment Received From: Marc Esser on behalf of Sue Kristjansson*
*Submitted On: 6/6/2016*
*Docket Number: 16-BSTD-06*

## SoCalGas Comments on Time Dependent Valuation of Energy in the Pre-Rulemaking of the 2019 California Building Energy Efficiency Standards

*Additional submitted attachment is included below.*

# SoCalGas Comments on Time Dependent Valuation of Energy in the Pre-Rulemaking of the 2019 California Building Energy Efficiency Standards

**In Regards to CEC Docket #16-BSTD-06**

June 3, 2016


Prepared by:

Sue Kristjansson, SoCalGas, with assistance by Bo White and Marc Esser, NegaWatt Consulting, Inc.

# Background

The California Energy Commission has begun its pre-rule making for the 2019 Building Energy Efficiency Standards (Standards) update of Time Dependent Value (TDV) of Energy. TDV methodology encapsulates long term forecast of hourly electricity, natural gas, and propane costs to building owners and used to assess the cost effectiveness parameters defined in Title 24 Building Code.

On May 10, 2016, the California Energy Commission (CEC) staff, along with its consultants, E3, conducted a workshop to present updates and solicit public comments on the proposed modifications to the TDV methodology for the 2019 T24 cycle. Presentation materials and various background documents were made available on-line and shared with the public and interested parties via a webinar ("CEC Docket #16-BSTD-06[1]").

# Summary of SoCalGas Comments to Staff Proposal

SoCalGas is broadly supportive of CEC staff's proposal and we commend CEC staff and the involved third parties for their thoughtful proposal. For your consideration, SoCalGas requests the following areas be addressed prior to adoption of the updated 2019 TDV criteria:

1. Provide a detailed technical support document for the data sources, inputs and calculation.
2. Clarify Calculation Spreadsheet
3. Provide the plan for updates to data sources and forecasts prior to 2019/2020 effective date.
4. Provide an assessment on comments made by E3 as to the "preliminary" nature of the current values and indicators.

The following section provides an explanatory statement in the four areas SoCalGas is requesting additional consideration and review by the Commission.

# Provide a detailed technical support document for the data sources, inputs and calculation

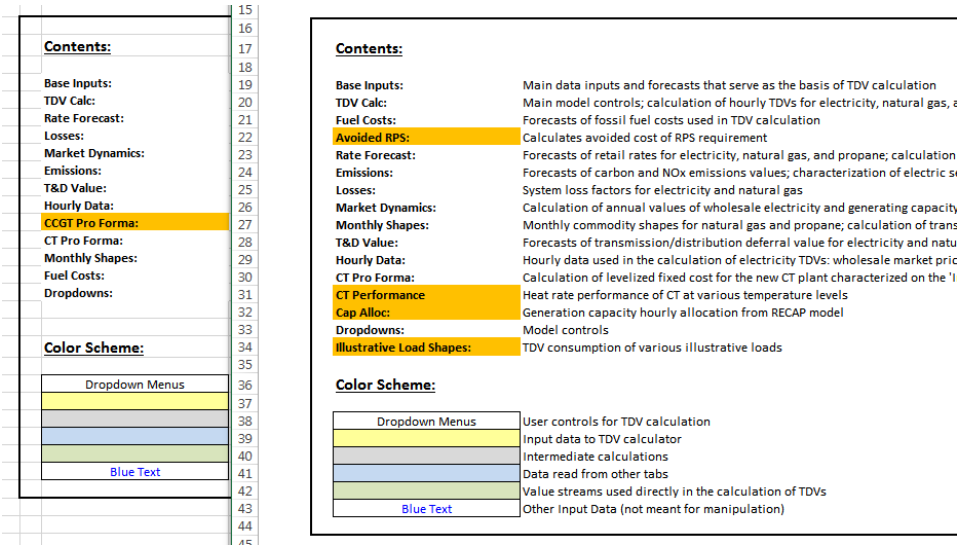
The files included in the docket are summary presentations and calculation worksheets. SoCalGas anticipated the same 73-page detailed technical document provided in the previous cycle so that we could assess the modifications and improvements made to the 2019 TDV standards.

Without this detailed information, we are unable to fully assess the determinants and sensitivities.

---

1 http://docketpublic.energy.ca.gov/PublicDocuments/Forms/AllItems.aspx?RootFolder=%2fPublicDocuments%2f16-BSTD-06&FolderCTID=0x012000854EBC55F6E2AC47926325FA751AA84F

The updated 2019 spreadsheet provided appears to include new content that was not considered in the previous version. The figure below shows the title pages of the 2016 and 2019 model spreadsheets overlapping, with changes highlighted in orange. It is unclear as to us why additional content was added or deleted for 2019. We would like to request a more detailed explanation than was provided in the summary presentation as to why this content was added or deleted, and relevant background information.



**Contents:**

| | |
|---|---|
| Base Inputs: | Main data inputs and forecasts that serve as the basis of TDV calculation |
| TDV Calc: | Main model controls; calculation of hourly TDVs for electricity, natural gas, a |
| Fuel Costs: | Forecasts of fossil fuel costs used in TDV calculation |
| Avoided RPS: | Calculates avoided cost of RPS requirement |
| Rate Forecast: | Forecasts of retail rates for electricity, natural gas, and propane; calculation |
| Emissions: | Forecasts of carbon and NOx emissions values; characterization of electric s |
| Losses: | System loss factors for electricity and natural gas |
| Market Dynamics: | Calculation of annual values of wholesale electricity and generating capacity |
| Monthly Shapes: | Monthly commodity shapes for natural gas and propane; calculation of trans |
| T&D Value: | Forecasts of transmission/distribution deferral value for electricity and natu |
| Hourly Data: | Hourly data used in the calculation of electricity TDVs: wholesale market pric |
| CT Pro Forma: | Calculation of levelized fixed cost for the new CT plant characterized on the 'I |
| CT Performance | Heat rate performance of CT at various temperature levels |
| Cap Alloc: | Generation capacity hourly allocation from RECAP model |
| Dropdowns: | Model controls |
| Illustrative Load Shapes: | TDV consumption of various illustrative loads |

**Color Scheme:**

| | |
|---|---|
| Dropdown Menus | User controls for TDV calculation |
| | Input data to TDV calculator |
| | Intermediate calculations |
| | Data read from other tabs |
| | Value streams used directly in the calculation of TDVs |
| Blue Text | Other Input Data (not meant for manipulation) |

Finally, one of the changes noted by E3 was that the current standards (2016) uses a temperature proxy and that the proposed 2019 standards will use a regression coefficient. The regression coefficient is not clearly defined. We request additional information regarding the calculation of the regression coefficient.

## Clarify Calculation Spreadsheet

In an effort to review the information provided, we tried to replicate the calculations for all the "Scenarios" allowed (variations of SB350 and IEPR Demand), and found that some of the underlying parameters of the Scenario selector were not populated. Scenario runs can only be performed for the first three options using the default spreadsheet configuration, or by manually editing the numerical values in the relevant fields[2], and thereby creating new scenarios. Also, it is not clear which combination of options represents the "default" that the CEC intends to integrate into CBECC as the baseline.

We request clarity in the spreadsheet inputs that are required for the various Scenarios as well as definitive relevance and impact(s) each cell may have on the final result.

[2] CO2 price, Rate Forecast, Gas Price Forecast (EG), Price Shape Forecast, Gas Retail Rate Forecast, RPS Targets

## Provide the plan for updates to data sources and forecasts prior to 2019/2020 effective date

Is there a plan to update the background data sources and forecasts prior to release of final 2019 California Code for Energy Efficiency? It does not appear that there is a provision to require underlying data and forecast updates. While we understand the need for the rapid deployment of the new 2019 TDV calculation as a tool to the energy community, we urge the commission to plan for an update of the underlying data sources and forecast paths prior to the effective date.

## Provide an assessment on comments made by presenters as to the "preliminary" nature of the current values and indicators.

During E3's presentation[3], Mr. Price indicated that only a "base" TDV analysis has been completed so far, and notably, the presentation is entitled "2019 *Draft* TDV Updates." We request that a viable public review of the data and methods be complete *prior to approval*, with no more than a few edge cases and error corrections remaining unresolved.

Thank you for your consideration.

[3] TN211415_20160509T151105_2019_Draft_TDV_Updates_E3_Presentation.PDF