

DOCKETED

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Project Title:	Updates to the 2019 Time Dependent Valuation of Energy
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Document Title:	2019 TDV 6-30-16 Cover with Noted Changes
Description:	Cover sheet for the TDV Excel file. Due to the size of the file and the nature of the file, the file is available on the Energy Commission's website.
Filer:	Adrian Ownby
Organization:	California Energy Commission
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CEC Title 24 TDV Calculator

Prepared by:



Energy Environmental Economics

Energy and Environmental Economics, Inc.
 101 Montgomery Street, Suite 1600
 San Francisco, CA 94104
 Phone: 415-391-5100
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Most important changes included in this version:

- Inclusion of new T&D allocation factors.
- New temperature threshold for allocating capacity values to "peak" days. 90° F to 90.5°F. This removed an eccentricity that we were seeing.
- Removal of a NOx adder to natural gas, this decreased natural gas TDVs.

Other changes were mainly calculation fixes and did not have a large impact:

- Inclusion of CO2 and var O&M in the dispatch logic to calculate combustion turbine energy revenues which feeds into capacity value (net cost of new entry).
- Changed CO2 units from short ton to long tons.

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, and propane
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 of retail adjustments for electricity and natural gas
Emissions:	Forecasts of carbon and NOx emissions values; characterization of electric sector emissions rates
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 transportation allocators for natural gas
T&D Value:	Forecasts of transmission/distribution deferral value for electricity and natural gas transportation marginal costs
Hourly Data:	Hourly data used in the calculation of electricity TDVs: wholesale market price shapes, utility TOU periods hourly loads, and T&D hourly allocators
CT Pro Forma:	Calculation of levelized fixed cost for the new CT plant characterized on the 'Inputs' tab
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)