

(10) Reporting Requirements. To demonstrate compliance with the provisions of this rule, and pursuant to the requirements of 4 CSR 240-22.080, the utility shall prepare a report that contains at least the following information:

(A) Identification of the load forecast models selected by the utility pursuant to section including description of the model structure, the driver variables selected, and the rationale for the approach—(1).

~~1. The [SMW1] narrative will describe the forecast models selected to fulfill each of the functions in subsections (1) (A) (E), explain why they were selected, and how the utility maintains consistency between the models. For example, if an end-use model were selected to analyze the impacts of legal mandates for energy efficiency, but an econometric model were selected to develop the long term forecast, what the utility did to assure that the end-use and econometric models used consistent inputs and generated consistent results.~~

~~2. The narrative will also identify and describe the independent variables utilized in the models pursuant to sections (3) and (4) for end-use approaches and to subsection (2) (D) for other model types. The utility shall provide, describe and document mathematical or statistical relationships, the key independent variables driving the forecasts, and the assumptions influencing these key independent variables as required pursuant to subsection (3), (3) (A) and (3) (B).~~

—(B) For each major class specified in subsection (2) (A) and each end-use as available, as well as for the net system load as applicable, the utility shall provide plots of ~~number of units, energy usage per unit and total class energy usage~~ and coincident class demands for the entire period of time covered by the historical database and forecast.

~~1. [SMW2]. Plots shall be produced for the summer period (June through September), the remaining nonsummer months and the calendar year.~~

~~2. The plots shall cover the historical data base period and the forecast period of at least twenty (20) years.~~

~~A. The historical period shall include both actual and weather-normalized energy usage per unit and total class energy usage.~~

~~B. The plots for the forecast period shall show energy usage per unit and total class energy usage for the base case forecast, and where available, the energy usage per unit by end-use component.~~

C1. The utility shall provide a narrative discussion that identifies, analyzes and explains significant differences between the forecast energy use per unit and the long-term and recent trends.

—(C) ~~For [SMW3] each major class specified in subsection (2) (A), the utility shall provide plots of class demand per unit and class total demand at time of summer and winter system peak. The plots shall cover the historical data base period and the forecast period of at least twenty (20) years.~~

~~1. The plots for the historical period shall include both actual and weather-normalized class demands per unit and total demands at the time of summer and winter system peak demands.~~

~~2. The plots for the forecast period shall show coincident demands per unit and total class coincident demands for the base case forecast, and where available, the coincident demands by end-use component.~~

—(DC) For the forecast of class energy and peak demands, the utility shall provide a summary of the sensitivity analysis required by section (7) of this rule that shows how changes in the driver variables affect the forecast.

~~The [SMW4] utility shall identify and describe key independent variables, describe how and why they were determined to be key independent variables, provide and document the expected range of values for the key independent variables and show how changes in the driver variables affect the forecast.~~

~~-(E)[SMW5]) For the net system load, the utility shall provide plots of energy usage and peak demand.~~

~~1. The energy plots shall include the summer, nonsummer and total energy usage for each calendar year.~~

~~2. The peak demand plots shall include the summer and winter peak demands.~~

~~3. The plots shall cover the historical data base period and the forecast period of at least twenty (20) years. The historical period shall include both actual and weather-normalized values. The forecast period shall include the base-case, low-case and high-case forecasts.~~

~~4. All plots will be labeled as stand alone figures, axes will be labeled with units and the plot will be referenced and explained in the text.~~

~~5. The utility shall describe how the subjective probabilities assigned to each forecast were determined.~~

~~-(FD) For the net system loadtotal energy and demand, the utility shall provide plots of summer peak and winter peak demand the base-case, low-case and high-case forecasts. forecasts assuming extreme weather.~~

~~-(G)[SMW6]) For each major class, the utility shall provide estimated load profile plots for the summer and winter system peak days.~~

~~1. The plots shall show each end-use component of the hourly load profile.~~

~~2. The plots shall be provided for the base year of the load forecast and for the fifth, tenth and twentieth years of the forecast.~~

~~-(H) For the net system load profiles, the utility shall provide plots for the summer peak day and the winter peak day.~~

~~1. The plots shall show each of the major class components of the net system load profile in a cumulative manner.~~

~~2. The plots shall be provided for the base year of the forecast and for the fifth, tenth and twentieth years of the forecast.~~

~~3. All plots will be labeled as stand alone figures, axes will be labeled with units and the plot will be referenced and explained in the text.~~

~~-(IE) The data presented in all plots also shall be provided in electronic workpaperstabular form. Data tables will be labeled including an identification of the corresponding plot, numbered, and identified and explained in the text.~~

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~~-(J) The utility shall provide a description of the methods used to develop all forecasts required by this rule, including an annotated summary that shows how these methods comply with the specific provisions of this rule. If end-use methods have not been used in forecasting, an explanation as to why they have not been used shall be included. Also included shall be the utility's schedule to acquire end use information and to develop end use forecasting techniques or a discussion as to why the acquisition of end-use information and the development of end-use forecasting techniques are either impractical or not cost-effective[SMW7].~~

~~-(KF) The utility shall provide a summary of its archived historical forecasts including a discussion comparing it to observed loads and the current forecast. The summary shall include:~~

~~1. A comparison of the historical final forecasts filed over the preceding twenty (20) years to the current forecasts and actual loads;~~

~~2. A narrative discussion of consumption trends identified in the forecasts~~

~~3. A narrative discussion of the ability of various forecasting models considered by the utility to produce reasonable projections.~~

~~-(L) The utility shall provide a description of its procedure to measure and update the affects of weather sensitivity on class and system electric loads, and shall document the methods used as required by subsection (2) (C) 1. and~~

~~3.[SMW8]~~