Overview

e-LoadForecast™ is an online 24/7 load forecasting service which delivers extremely accurate load forecasts for client-specific demand data. The forecasts can be generated for various forecast horizons (short-term and mid-term) in an hourly or sub-hourly resolution. The forecasting engine consists of multiple intelligent system-based models that employ artificial neural networks, fuzzy logic and evolutionary computing technologies. Our experienced engineers and forecast specialists continuously monitor model performance, ensuring accurate and reliable forecasts at all times. The e-LoadForecast™ service enables the user to utilize sophisticated load forecasting techniques and take advantage of the knowledge of experienced forecasting experts without the hassles of installed in-house software maintenance and calibration.

Short-Term Forecasting

- Forecast horizon extending up to 15 days out
- Hourly or sub-hourly forecasts
- Actual and forecasted weather data provided by PRT in affiliation with three major weather service providers.
- Load forecasts are continually updated
  - Every hour using previous hour’s actual weather
  - With every major update of weather forecast (three to four times per day)
  - Anytime actual load data is uploaded by user
- Load and weather forecasts are posted to a secure web site in tabular and graphical forms for 24/7 viewing and downloading using any conventional web browser.
- User only needs to:
  - Provide historical load data for initial model building
  - Upload recent actual load data whenever available, automation tools provided.

![Example of e-LoadForecast Web Page](example.png)

- The optimal location and number of weather stations are determined for loads distributed across a service territory with varying weather patterns.
- Forecast accuracy and actual load/weather data integrity monitored continually by forecast specialists to ensure optimal results.
- Tools are available for automated download of forecasts in a variety of formats.
- 24/7 support
Interactive Access via Excel Interface

In addition to web posting, an interactive mode of access is provided via a Microsoft Excel® interface. The user can directly work with the hosted forecasting engines and run “what-if” scenarios by editing PRT provided weather forecasts and computing the corresponding load forecasts. User friendly tools are provided for reshaping weather forecasts.

- A number of other features are available via the Excel interface:
  - View load and weather of similar days to days in the forecast horizon. Similarity criteria are user defined.
  - Graphical tools for reshaping load forecasts
  - Performance analysis of forecast accuracy
  - Comparison of forecasts to load/weather of user selected days in history
  - Viewing historical data in tabular and graphical forms

- User developed macros can be integrated into the Excel interface.

- Forecasting models are calibrated as deemed necessary with no need for user involvement.

Mid-Term Forecasting

- Forecast horizon extending up to five years out
- Daily or hourly forecasts
- Computes load growth/loss trends from historical data and extrapolates them
- Intelligent system-based forecasting models are optimized for long-term forecasting
- User interacts with the hosted forecasting engines through a Microsoft Excel® interface

- A number of weather scenarios for each month of the forecast horizon (e.g., Normal, Below Normal, Above Normal, etc.) can be simulated using up to 15 years of historical weather data provided by PRT.

- Two statistical methods for simulating weather scenarios from historical data
- User friendly tools for simulating unusual weather conditions such as extreme cold fronts or record low temperatures
- Weather from a specified period in history can be used
- User specified weather may be utilized
- Monthly and yearly demand and peak loads are computed from the generated daily/hourly forecasts

We offer a free trial of the e-LoadForecast Service.
Contact us for more information.
Phone: 214-692-5252
Email: forecast@prt-inc.com

About PRT

PRT specializes in load and price forecasting for the energy industry. Since its inception in 1994, PRT has been in the forefront of developing precise forecasting solutions. We offer an array of online forecasting services, software products and custom solutions. With over 150 clients, PRT’s forecasting products are among the most widely used and trusted.