

## 1. GENERAL

The Lansing Board of Water and Light (BWL) is soliciting Request for Information for the purchase, installation, and training on a Generation Management Services Program

## 2. BOARD OF WATER AND LIGHT BACKGROUND

The BWL was founded in 1885 and is the largest municipally owned electric utility in Michigan and among the 30 largest in the United States. An eight-member Board of Commissioners appointed by the mayor and confirmed by the Lansing City Council governs the BWL.

The BWL employs a total of approximately 725 bargaining and non-bargaining employees. The bargaining unit employees are represented by the International Brotherhood of Electrical workers (IBEW) local 352.

The BWL owns and operates:

- (a) an electric system, which generates, purchases and distributes electric power and energy, and provides electric service to over 99,000 residential, commercial, and industrial customers in the greater Lansing, Michigan area, and wholesale customers through participation in the Midcontinent Independent System Operator, Inc. (MISO), which is BWL's regional electric grid.;
- (b) water wells, a raw water transmission system, water conditioning facilities, and an extensive water distribution system serving potable water to over 57,000 residential, commercial, and industrial customers in the greater Lansing area.
- (c) steam generation boilers, a steam transmission and distribution system serving approximately 151 customers, and a chilled water facility and distribution piping system serving 19 customers in the city of Lansing.

The BWL's total operating revenue for fiscal year 2020 was \$364,612,954.00.

Additional BWL background and information may be viewed at [www.lbw.com](http://www.lbw.com).

## 3. SPECIFICATIONS/SCOPE OF WORK

Seeking an application to perform cost-based and priced based unit commitment and economic dispatch for modeling in the MISO market for an entire energy asset portfolio including but not limited to the following functionality:

- Thermal generation including complex combined-cycle assets
- Renewable generation
- Incorporates market prices for power and fuel
- Integrates with clients load forecasting model – Enverus {PRT}
- Includes complex option and forward contracts for natural gas and power
- Monitor expected and actual fuel consumption
- Submits economics bids and offers directly into the MISO Day Ahead Market or to OATI Web Trader
- Ability to run simulations including Stochastic studies that assess the impact of market price volatilities, unit forced outages and load uncertainties
- Calculate and produce Heat Rates curves
- Tracks emission rates and allowances
- Captures dispatch limits, must-run, and maintenance constraints
- Calculate the break-even cost for proposed purchases or sales
- Model physical long or short positions of forward or option commodity contracts. Optimize trading and asset positions as a single portfolio
- Automate settlement and billing processes for bilateral contracts (energy, ancillary services, capacity, REC, etc.) for Purchase Power Agreements (PPAs), tolling agreements, industrial customers, all settlement and accounting of transmission-related charges and credits