

## **IESVic Seminar**

- DATE:** Thursday, April 26th, 2018
- TIME:** 2:00 – 3:00 pm
- LOCATION:** Engineering Computer Science Bldg. (ECS) Room 660
- SPEAKER:** **Brian Moghadam**  
Business Development  
Powerex
- TITLE:** ***The Energy Imbalance Market: British Columbia, Powerex and Opportunity***

**Abstract** Powerex is the energy marketing arm of BC Hydro. In business for thirty years, it buys and sells wholesale electricity, natural gas and renewable energy products in Western North America. Powerex also monetises the surplus capability of BC Hydro's system which allows Powerex to offer unparalleled reliable and flexible physical electricity products.

The Energy Imbalance Market (EIM) is an intra-hour market, stretching across eight Western states. It operates in 15 and 5 minute intervals in order to balance the difference between the day-ahead and hour-ahead forecasts and schedules related to generation, load and interchange between balancing areas. If more power is required in a given 5 or 15 minute interval than was scheduled for the hour in the day-ahead timeframe in a given balancing area, the EIM market makes up the difference with the least expensive delivered resource across the entire EIM footprint. Sometimes this can be an offsetting imbalance (e.g. where less power was required than predicted) in another balancing area.

With increasing amounts of renewable intermittent and variable energy entering the grid in the West, each new EIM member contributes generation and transmission resources to the EIM market, thus providing incremental resources to help balance renewables. The larger area also provides greater diversity whereby imbalances in load and variable generation can cancel each other out; thereby saving the need to move any dispatchable generation to balance the system.

Powerex will participate in the EIM market at the BC/US border such that the market footprint will remain entirely within the US. Powerex's participation commenced on April 4, 2018. Powerex' Brian Moghadam will discuss Powerex' business lines, the EIM market, why Powerex chose to join, as well as opportunities and challenges going forward".