

Vermont Weather Analytics Center



Vermont System Planning
Committee
October 17, 2018

Review of Analytics Efforts

JDA Assets

➤ Demand Forecasting

➤ Peak Forecasting/ Peak Load Management

➤ Weather Insights

➤ Deep Thunder

Commercial Products

Maestros

Nostradamus

HyperCast (Wind/Solar)

Xplore (Wind/Solar)

SPA Targeted Products

➤ Demand Forecast

➤ Peak Forecasting

➤ Peak Load Management

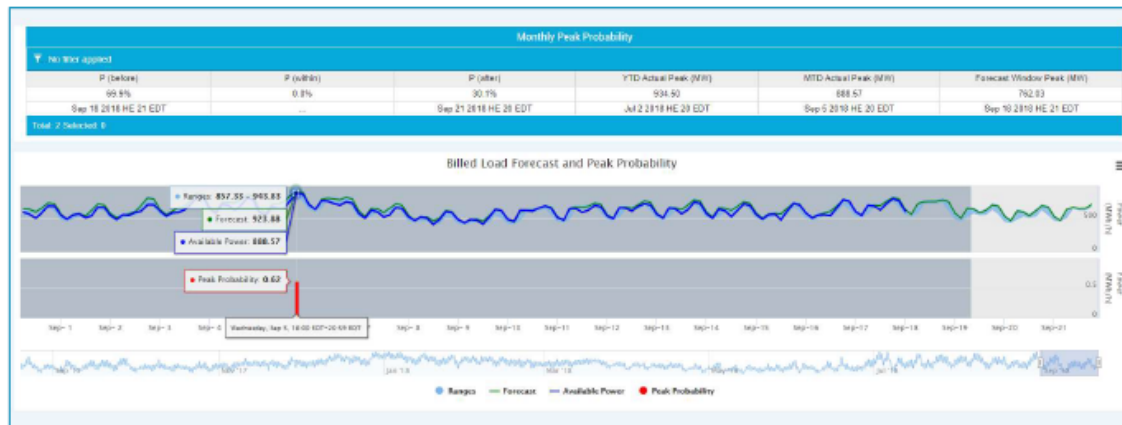
Model Performance -PLM



Peak Load Management VT Peak Notification – Update



- VT Monthly Peak Load was not flagged in PLM but manual communication issued for **September, 5th** @ HE 20:00 – Current probability @70%
 - Primary Notification issue. Issue with early month algorithm while this could very well to be the peak
 - Peak: 923.88W (Predicted) / Peak: 888.57MWh (Actual)
 - Actual Peak Time HE 20:00



September 20, 2018

Utopus Insights Confidential – JDA Asset

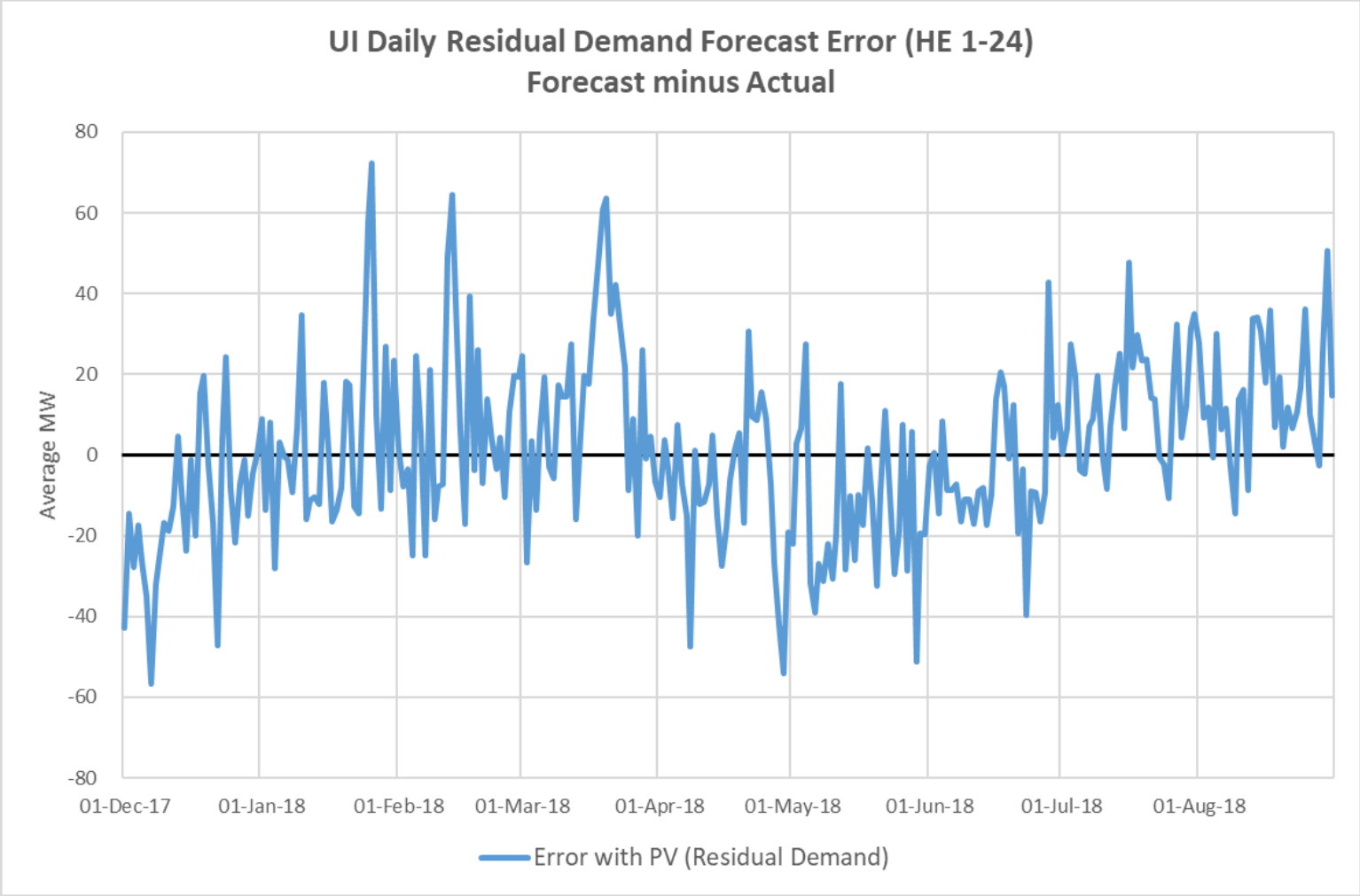
4

MAPE for August

UI MAPE Results Summary				
		Residual Demand	Demand*	
May-18		5.3%	4.5%	
Jun-18		3.7%	3.1%	
Jul-18		3.7%	3.0%	
Aug-18		3.9%	3.4%	
* assuming 1.6 scaling factor on distributed PV				

From June onward, the “penultimate” version of the forecast is used to report metrics, and this is 6 hours ahead of real-time on average. This takes out forecast improvements to recent past which are being made in UI after real-time.

Residual Demand Forecast Error



JDA – Closeout UAT

- User Acceptance Testing for Products
(Mid September Resources Available)

Count of Severity	Column Labels			
Row Labels	Priority 2 - High	Priority 3 - Medium	Priority 4 - Low	Grand Total
Severity 2 - High	15	2		17
Severity 3 - Medium	1	15	12	28
Severity 4 - Low		16	52	68
Grand Total	16	33	64	113

JDA Closeout Other Items

- Jul-Dec
 - Portal/HW/SW Strategy Effort
 - Implementation Plan
 - Work with others (ex. Jay Schafer/UVM)
 - STLF and Next Day Contingency
 - Documentation
 - Open items on models (example “total solar gen #”)
 - Items moved to SPA
 - 7-10 Day Demand/Weather
 - ISO NE Forecasting
 - Portal Improvements (Example histograms)

Strategic Partnership Development

- SPA Document
- Governance Model
- Schedule Resource/Loading UI Validation
- VELCO Estimate
- MOU/Services Agreement
- First Cost Report

Governance Model- Draft Discussion

- Sponsors Committee
 - Executive sponsorship/involvement monthly
 - UI/VELCO/DU- Sr. Mgmt.
 - Scope/Schedule/Budget Review
 - Resource Management
- Steering Committee
 - VELCO/UI/DU Members SMEs
 - Quarterly or tied to major milestones
 - Workshop format

Next Steps

Wrap-up Discussion

- Scheduling next quarter's work
- Set up Billable WOs
- Communication with Project Team