



August 2022 OC – PPL DLR Update

David Hislop
Manager, Outage Analysis Technologies

Operating Committee
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PPL DLR Facilities: Key Dates & Time Windows

- **8/31: DLR Go – NoGo Determination & Outreach***
 - 2 Weeks prior to Scheduled Go-Live for real-time DLR use
- **9/12 1500-1600: Forecasted DLR Go-Live***
 - PPL forecasted DLR moved to PJM/PPL production
 - PJM begins posting of PPL forecasted DLR
- **9/13 Throughout Day in Reliability Studies & DA Market for 9/14**
 - PJM leveraging PPL ambient tables for HE01 to HE12 of studies related to 9/14
 - PJM leveraging PPL forecasted DLR for HE13 to HE24 of studies related to 9/14
- **9/14 1200-1300: Real-time DLR Go-Live***
 - PPL real-time DLR moved to PJM/PPL production
 - PJM begins posting of PPL real-time DLR

*OC Stakeholder Pardot communication

Forecasted DLR Go-Live

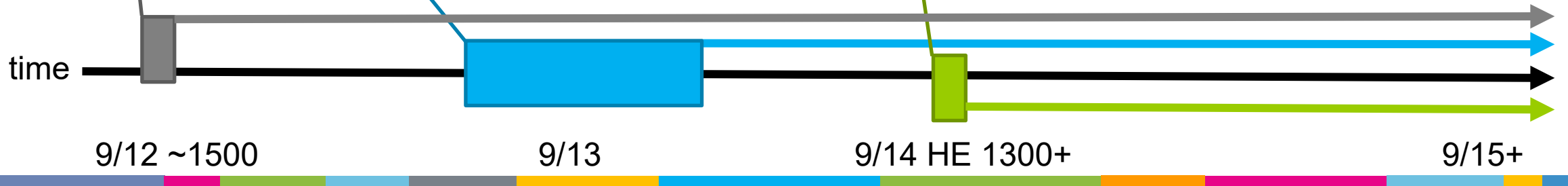
- Hourly rolling projections into 9/14 Real-time Go-Live date.

Forecasted DLR in 9/14 PJM Reliability Studies & DA Market

- Day of 9/13 ...
- PJM leveraging default ambient ratings tables out to 9/14 HE 12
- PJM leveraging DLR forecasted values for HE 13+

Real-time DLR Go-Live

- Day of 9/14 ~1200 - 1300
- PPL begins sending real-time DLR to PJM



- Any changes to the plan will be communicated to OC Stakeholders via Pardot.
- Forecasted and real-time ratings will be posted as per planned communication methods in alignment with other ratings:
 - PJM posts DA Market limits to Data Miner, which will include DLR limits associated with facilities within the case, to the following location:
https://dataminer2.pjm.com/feed/da_ratings
 - Rolling DLR forecasted and real-time production DLR will be captured in the following location: <https://www.pjm.com/markets-and-operations/etools/oasis/system-information/ratings-information.aspx>

Forecasted and Real-time DLR both derived via PPL's TO Rating Methodology, but in different timeframes and with the data available at the time of the calculation.

PPL leveraging confidence factors to ensure forecasted DLR are unlikely to exceed the projected real-time DLR to be expected for the same hours:

- There's no required % of error for DLR forecast vs. real-time
 - Potential consideration for DLR OC PS/IC Phase 2 group?
- Similar error can occur with existing ambient tables, if one is leveraging a different Temp Set
 - Ambient Tables: A difference of a few degrees can drive substantively different values between forecasted & real-time ratings (via temp sets) across an entire TO zone for any/all facilities
- The upper bounds of DLR vs. traditional approach can increase that forecasted vs. RT deviation

PJM is a ratings *consumer*, but does not *calculate* thermal/voltage ratings:

- If a provided rating is within bounds of reasonability, PJM validation is limited
- Real-time DLR is not being dynamically validated in our EMS/Markets against the forecasted ratings, but is treated as stand alone

Presenters:

Dave Hislop

David.Hislop@pjm.com

SMEs:

DynamicLineRatingsTm@pjm.com

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Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

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