

A dynamic line rating (DLR) system instruments a transmission line, and combined with weather information, provides the true power handling capacity of a transmission line on both real-time and forecast bases. Numerous studies have demonstrated DLR provides as much as 100% greater transmission line capacity increase above static ratings¹. DLR is noted in a recent FERC Policy Statement as a technology that creates “additional incremental capacity without significant construction.”² This again is characteristic of an NTA.

Just as DR acts as a virtual negative generator, DLR can be seen acting as a virtual transmission path. As a resource it will have the effect of reducing congestion on a line and impact nodal LMPs. Since remote generation or DR cannot be used to balance supply and demand if behind a constrained line, the virtual transmission path provided by DLR can now make these resources available. The congestion component of an LMP is often quite significant. In one example zonal LMPs (NYISO LBMPs from June 5, 2002, hour 14)³ the congestion component is seen to make up half of some of the LMPs. This capability can be argued to be worth the difference between the constrained and unconstrained LMPs.

Therefore, it is proposed that:

- Any entity (e.g., transmission owner, independent 3rd party, etc.) deploying and acting as “DLR-resource provider,” be permitted to deploy DLR which incorporates line rating forecasting on marginally to heavily constrained lines.
- The difference between the constrained and unconstrained LMPs be considered the value of the DLR resource, which provides a means to allow the DLR-resource provider to be compensated as per FERC Order 745.
- It is proposed a portion of this value (25% is proposed) shall be paid to the DLR-resource provider

We urge the Commission to adopt this proposal because it will lead to a simplified method to incent the deployment of DLR and meets the requirement of FPA 219(b)3 to be just and reasonable, and administratively workable.

Respectfully submitted,

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¹ “Dynamic Line Rating Systems for Transmission Lines: Topical Report,” Smart Grid Demonstration Program, US DOE, April 25, 2014, page vi

² 141 FERC ¶ 61,129, page 15

³ California ISO CRR Education Class #2, “Locational Marginal Pricing (LMP): Basics of Nodal Price Calculation,” slide 44, December 2005