Mitigating Uplift

FERC Price Formation Workshop on Uplift Payments

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Why The Commission Must Proactively Address Uplift Issues

- The system is changing rapidly, and accurate price signals are needed to communicate the value of new investments: i.e., micro-grids, distributed generation, etc.
- Accurate and transparent price signals inform investment and retirement decisions and technology choices and encourage resource performance.
- To succeed and produce the lowest prices in the long-term, the market must produce locational market clearing prices (LMP) that reflect all costs of operating the system.
- Uplift is essentially an out-of-market solution that is inconsistent with LMP and masks the costs of operating the system.
  - Repeated uplift results in energy price suppression, which is particularly harmful to base load units as these units rely greatly on energy revenues.
  - Units that are routinely paid uplift do not face competition and are not incented to lower costs.
  - Uplift is borne by load and is difficult, if not impossible, for load to hedge through bilateral contracts.
- Uplifting the cost of actions taken to meet demand may appear to be cheaper than reflecting those costs in the LMP. But this is a myopic view as uplift masks the true cost of operating the system and fails to send the appropriate investment signals.

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Solution – Reducing Uplift by Increasing Reserves/Managing Uncertainty

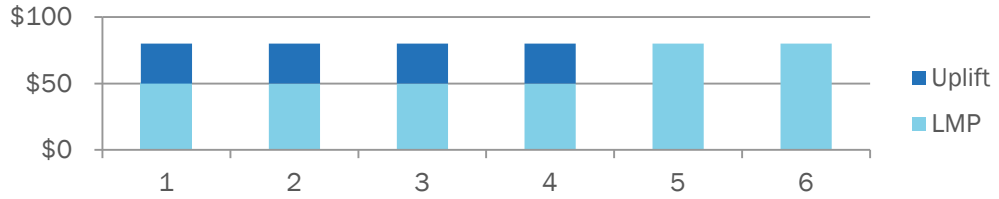
Resources that are dispatched by the RTO/ISO, but are not needed to serve load or satisfy defined reserve requirements artificially lower the "cost of the next marginal MW" which suppresses LMP and creates uplift. Resource commitments above real time load plus defined reserves requirements should be accounted for by increasing reserve levels to the extent that resource commitments exceed load plus defined reserves.

- Units are frequently committed beyond need (load + defined reserves) to improve operator flexibility/manage uncertainty. Without increasing reserves to account for the "extra insurance" that has been committed by the RTO/ISO, LMP will be depressed and uplift will increase.
- **Managing the uncertainty of interchange transactions**
  - Interchange can deviate on a 15-minute schedule which increases operator uncertainty and often results in RTO/ISOs dispatching additional internal units to ensure reliable operations. If actual interchange exceeds operator expectations, then the costs of additional unit commitments that provide "extra insurance" are uplifted.
  - The cost of dispatching units within the RTO/ISO to accommodate interchange uncertainty must be transparently communicated to the market through LMP.

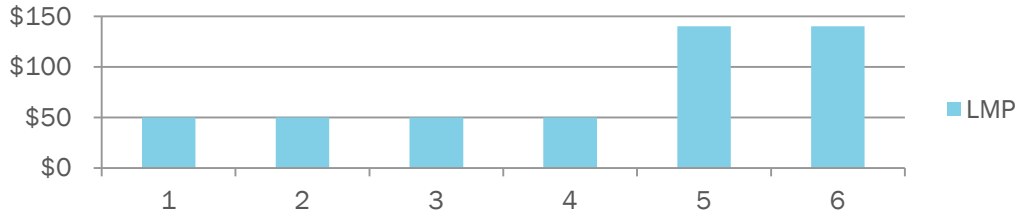
Solution – Reducing Uplift through LMP

All generation scheduled and dispatched by the RTO/ISO to meet system needs must be reflected in LMP. In particular, the cost of the out of merit generation needed to meet system needs must be reflected in the LMP in the hours in which it is needed.

- Assume for example, in hour 1 the system is in balance to meet forecasted load. The RTO/ISO identifies that it will need a particular unit (Unit A, with a cost of $80/MWh) online in hours 5-6 to meet system needs. Unit A has a long minimum run time, and the RTO/ISO dispatches Unit A at minimum load in hour 1 to be available in hours 5-6. Under the existing system, the cost of Unit A is uplifted (total uplift of $120) and the rest of the market sees the LMP of $50.



- When Unit A is dispatched to meet a system need in hours 5-6, the LMP should reflect the cost of committing Unit A to be available in those hours. The cost of committing the unit to be available in hours 5-6 includes the cost of dispatching the unit for hours 1-4 ($120). Thus the clearing price in hours 5-6 would be $140 ($80 + $120/2 hours).



- The price during hours 5-6 under this LMP methodology would reflect the value to the system of the marginal unit.

More Accurate Price Signals will Improve Transparency

FERC staff observed that uplift payments and the reasons they are incurred lack transparency. We support increasing reserves and improving LMP pricing in order to provide greater transparency into the system needs.

Ensuring that the cost of the next marginal unit is reflected in the LMP and not uplifted will ensure:

- price signals inform technology choices, generation investment decisions, transmission investment decisions, and retirement decisions thereby lowering long-term prices for consumers.
    - For example, if a generator is repeatedly paid uplift to meet a locational reliability need, that generator's owner will not be incented to invest in operational improvements and competitors will not be incented to develop lower cost solutions to resolve that need.
- If costs of dispatching units out-of-merit to support system needs are reflected in clearing prices, the transparency of these actions will encourage a market response that is efficient and competitive.

Roadmap Forward for the Commission

The series of price formation workshops directed by the Commission, starting with this workshop on uplift, address important market issues and provide a valuable forum to discuss the issues and the urgent reforms needed. To ensure that price formation improvements are implemented, the Commission should:

- complete the scheduled series of workshops on price formation in the energy and ancillary services markets;
- provide an opportunity for panel participants and interested parties to submit comments following the workshops with a focus on best practices for improving price formation; and
- issue a notice of proposed rulemaking on the best practices based on the workshops and comments submitted.

Simultaneously, continue to process RTO/ISO filings that address uplift and related issues, e.g., proposals that support firm fuel or high availability capacity supply obligations, which will value resource performance and mitigate fuel procurement risks that frequently result in high uplift costs.

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