Calpine Market Design Concerns for the Market Simulation Group

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Throughout the development of the cap and trade rules, Calpine repeatedly has expressed concerns about holding and auction purchase limits. We are the largest emitter in the electricity generation sector with annual emissions in excess of 8 MMt annually. Notwithstanding the Limited Exemption provided by section 95920(d)(2) of the cap and trade rules, the holding and auction purchase limits severely constrain the ability of large emitters to hedge and/or engage in routine commercial activity. For example, the limits may prevent market participants from purchasing and banking allowances from the first compliance period until the second compliance period in the event that prices for second compliance period allowances are expected to be higher. Further, the limits may prevent large emitters from fulfilling compliance obligations exclusively through purchasing allowances at auction and retiring them directly, i.e., the limits may force large emitters to rely unduly on the secondary market where transaction costs may be higher, particularly in cases in which their emissions exceed their historical emissions, for example, if gas generation runs more due to outages of nuclear plants or poor hydro conditions.

It is Calpine's understanding that the inclusion of holding limits and auction purchase limits in the cap and trade rules has been motivated by concerns about the exercise of market power. Consequently, Calpine requests that the Market Simulation Group examine the impact of the limits on the ability and incentive to exercise market power. In particular, Calpine requests that the Market Simulation Group consider the following questions:

- What constitutes the exercise of market power in an allowance market?
    - Does holding allowances in anticipation of future compliance obligations constitute the exercise of market power?
    - Does holding allowances in expectation of higher future prices for allowances constitute the exercise of market power?
- Under what circumstances would it be profitable for an electricity generator to exercise market power in the allowance market?
- How does the incentive for an electricity generator to exercise market power in the allowance market depend on:
    - The extent to which an electricity generator has sold forward energy and capacity?
    - The composition of an electricity generator's portfolio, e.g., with respect to fuels and generating technologies?
    - The allocation of allowances?
    - Power market rules, such as bid caps and general prohibitions on gaming?
    - The size of holding limits?

    - The size of auction purchase limits?
    - The volume and pricing of allowances available from the Allowance Price Containment Reserve?
    - The supply of offsets?
    - Limits on the use of offsets for compliance?

- Under what circumstances would it be profitable for other entities, including electric utilities and power/allowance marketers to exercise market power in the allowance market?
    - How are the incentives of different types of market participants to exercise market power influenced by factors such as allowance allocations and GHG compliance obligations associated with owned and contracted electricity generation?

- Is there an analytic basis for position/holding limits?
- To the extent that an analytic basis for position limits exists, how does it reflect the following factors:
    - The extent to which a particular entity is inherently "long" or "short" the commodity that is the subject of the position limit, e.g., as a consumer of jet fuel, an airline may be inherently short jet fuel?
    - The size of an entity's inherent long or short relative to the size of the market as a whole, e.g., the size of an airline relative the size of the market for jet fuel as a whole?

- Are there market design elements other than holding limits and auction purchase limits that might limit the exercise of market power more effectively?

- Could holding limits prevent the convergence of prices between different compliance periods that might occur in the absence of holding limits?

    - Are there efficiency losses/social costs associated with the potential impact of holding limits on price convergence across compliance periods?

Thank you for your consideration.