New U.S. Generation Market Power Analysis and Mitigation Procedures — What Is the Federal Regulatory Commission up to?

by Frank A. Felder

The US federal energy regulator FERC has been actively engaged in developing and refining its systems to mitigate market power in US markets for several years. The most recent efforts are significant enough that they have been attracting attention even outside the US, both for their concepts and for their implementation. Professor Felder's article provides an overview of some of the major issues. Ontario, despite having a relatively high level of concentration of ownership in the generation sector, does not have a comparable system for mitigation of market power. – Editor.

Competitors in most industries typically do not need the government's permission to charge prevailing market prices. Not so for U.S. wholesale electricity generators, who must apply to the U.S. Federal Energy Regulatory Commission (FERC) for authority to charge market-based rates. Applicants must satisfy the FERC that they cannot exercise market power and charge unjust and unreasonable prices, submitting a market power analysis to back up their claim. And if approved, that authority is reviewed every three years.

A generally accepted definition of supplier market power is the ability to increase the price of electricity by withholding supply from the market that results in higher profits for the withholding supplier.

Now the FERC has changed the market power test it will use when considering market-based rate applications (through two recent orders from April 14 and May 13 of this year, Docket Nos. ER96-2495-016, et al. and ER02-1406-001, et al.). The motivation is partly administrative: the Commission must evaluate thousands of applications and needs a method that quickly and relatively accurately separates the no-brainers from the ambiguous ones. But the FERC is also trying to address some limitations in its prior approach.

The new test, which replaces the supply margin assessment test that was implemented in November 20, 2001 (97 FERC 61,219), contains two indicative screens. These screens are indicative because if an applicant passes both screens, there is a rebuttable presumption that it does not have market power. Intervenors, however, can present evidence to refute this presumption. If the applicant fails one or more screens, it has the opportunity to present a more detailed market power analysis by conducting a delivered price test. The applicant could also file a mitigation proposal tailored to its circumstances or accept cost-based rates.

The first screen is an uncommitted pivotal supplier analysis that evaluates the potential of an applicant (including its affiliates) to exercise market power based on the control area's annual peak demand. The second screen is an uncommitted market share analysis that will evaluate seasonally the market share of the uncommitted capacity of an applicant and its affiliates. The pivotal supplier analysis concentrates on the ability to exercise market power unilaterally, whereas the market share analysis may also indicate the ability to facilitate coordinated interaction with other sellers – that is, tacit collusion.

The uncommitted pivotal supplier analysis is similar conceptually to the supply margin assessment but differs in some details. The idea here is to determine whether the applicant's capacity is pivotal: can market demand be met without some contribution of supply by the applicant? Specifically, could the applicant withhold all of its uncommitted capacity (i.e., supply that is not obligated for native load or long-term firm non-requirement sales) and would there be insufficient capacity from other suppliers to satisfy wholesale demand? Unlike the SMA, which used uncommitted capacity only for an applicant's competitors in adjoining control areas, this new screen uses the uncommitted capacity of both the applicant and its competitors, including from an applicant's remote generation.

The wholesale market share analysis measures for the four seasons if an applicant has a dominant position based on the number of megawatts of uncommitted capacity owned or controlled by the applicant as compared to the uncommitted capacity of the entire relevant market. The Commission adopts the initial threshold of 20 percent: a supplier that has less than a 20 percent share for all seasons satisfies this screen.

The test of last resort for the applicant that fails one or more of these screens but still wants to obtain market-based rates is the delivered price test. This test is long-standing and was introduced as part of the Commission's merger policy in the mid 1990's. The idea is to evaluate the level of competition of the market of interest at various system conditions by determining the applicant's effective competitors – that is, competitors that can deliver power to the market at less than or equal to 5 percent over the market price. The delivered price test is, not surprisingly, more accurate than the two screens, but requires more time, effort, and data.

Of course, it would be too much to ask that these

Environmental commission rejects claims against OPG

Montreal: The Canada-US body set up under NAFTA has dismissed claims by a number of environmental organizations that Ottawa be required to force Ontario Power Generation to reduce emissions from its coal-fired plants in southern Ontario.

The Secretariat of the Commission for Environmental Cooperation on May 28 concluded that the submission, under Article 14 of the North American Agreement for Environmental Cooperation (NAAEC), "does not warrant the development of a factual record." The case was brought to the CEC by 49 bodies, including environmental organizations in Canada and the United States and the Attorneys-General of three US States.

The submitters have been charging that emissions of mercury, sulfur dioxide and nitrogen oxides from OPG's coal-fired power plants in southern Ontario pollute the air and water downwind, in eastern Canada and the northeastern United States and that Canada is failing to effectively enforce sections 166 and 176 of the Canadian Environmental Protection Act, 1999 and section 36(3) of the Fisheries Act against the OPG facilities.

CEPA section 166 calls for federal action when there is reason to believe that air pollution from a Canadian source creates, or may reasonably be anticipated to create, air pollution in a foreign country or air pollution that violates or is likely to violate an international agreement. In regard to non-federal sources of pollution such as OPG, section 166 contemplates, first, consultations to determine whether the provincial government can address the transboundary pollution and, second, if the provincial government cannot or does not take action, either a notice requiring preparation and implementation of a pollution prevention plan or recommendation of regulations to the Governor in Council regarding the pollution.

In its response, the government of Canada said that it has been working cooperatively with the government of Ontario for many years to ensure that OPG's atmospheric emissions are reduced in a timely fashion. In light of Ontario's ongoing efforts, Canada asserted that there is no need at this time for federal action pursuant to section 166 of CEPA, and also that there is insufficient evidence of a causal link between mercury emissions originating from OPG's facilities and the mercury found in fish-bearing waters. Consequently, Environment Canada is working on an inspection program in Ontario that will include the difficult task of sampling and tracking the fate of mercury emissions from OPG's facilities.

The Secretariat concluded that actions in Canada, together with the planned closure of some or all of OPG's coal-fired power plants, indicate "a dynamic and improving situation," and that the CEC need take no action at present.

For more information, see www.cec.org/news/details/index.cfm?varlan=english&ID=2610, and www.cec.org/citizen/submissions/details/index.cfm?varlan=english&ID=88.

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Draft emission trading legislation underway

Natural Resources Canada is currently consulting with Large Final Emitters (LFEs) in order to draft legislation and regulations to support greenhouse gas emission reduction. The federal government has indicated that this initiative will go ahead regardless of whether the Kyoto Protocol is ratified, but it is part of its strategy to meet its obligations under the Protocol. The goal is to reduce emissions to 85 per cent of forecast 2010 emissions, and emissions of the LFEs will be capped to enable this.

Part of the regime will be a system to allow the trading of credits or allocations, to allow companies to balance excess emissions in one area against excess reductions in other areas. Draft legislation to provide a framework for the regime is expected to go to Cabinet in the fall of 2004. If approved, it will go before Parliament early in 2005. A full-fledged legislative regime would be in place as early as 2007 so that Canada is prepared for the first Kyoto compliance period of 2008-2012. The federal government has already put in place an emissions reporting regime as a first step in this process.

— from Gowlings Environmental Bulletin

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new rules be made permanent. Concurrent with these changes, the FERC is establishing rule-making to conduct a comprehensive review of the appropriate analysis for granting authority for market-based rates that would also address generation market power, transmission market power, barriers to entry, and affiliate abuse and reciprocal dealing. Moreover, these new rules are only a part of the FERC's overall market power policy; a substantial portion of that policy is embedded within the particular market monitoring and mitigation policies adopted by the ISOs and RTOs that exist in U.S. electricity markets.

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