----- Original Message -----From: mcadwalader Sent: 05/27/2004 02:14 PM To: Jcharlton@nyiso.com Subject: Cost of Entry

John,

I am resending the memo on the cost of entry I sent to you at the beginning of the year. As you can see, it concludes that using GTs to estimate the net cost of entry is reasonable and appropriate IF GTs are part of the least-cost development mix, and it recommends that the consultant should assess whether GTs were part of the least cost development mix. When we discussed this, you agreed that the consultant should assess that, and when I raised the issue before the ICAP WG, it was agreed that this should be assessed and, if it turned out that the GT cost did not represent the cost of entry, the tariff should be modified appropriately. Therefore, I was dismayed to hear today that Levitan does not consider such an assessment to be part of its scope, and to hear declare that the cost of developing a GT always sets the net cost of entry.

If GTs would not be built, the cost of developing GTs is irrelevant to the determination of what revenue streams would be required to induce entry, since entrants would not be developing GTs. This analysis needs to be performed.

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Estimating the Net Cost of Entry.doc



MEMORANDUM

DATE:	January 8, 2004
То:	John Charlton
FROM:	Mike Cadwalader
Re:	Estimating the Net Cost of Entry

The draft RFP for review of the installed capacity demand curve calls upon the consultant to estimate the net cost of entry (in each locality and in the rest of the state) by determining the levelized cost associated with developing a gas turbine. This requirement, in turn, is founded in tariff language which requires that the periodic review of the installed capacity demand curve "determine the current localized levelized embedded cost of gas turbines...."¹ However, I have concerns that this proposal could lead to incorrect calculation of the net cost of entry, and so I hope that the RFP can be modified as necessary to eliminate this risk. Modifying the RFP without changing the tariff would render it inconsistent with the tariff, so we would also need to make conforming tariff changes would be required, but if this proposal is not controversial, perhaps it would be possible to issue the modified RFP first with the necessary tariff changes to follow. Consequently, I recommend that we bring this issue before the ICAP Working Group to assess whether the tariff changes described below would be controversial before issuing the RFP.

THE PROBLEM

Suppose that there are two different generating technologies, A and B. Generators with technology A have low variable costs, but they are expensive to build. Generators with technology B can be built inexpensively, but they are expensive to operate. Depending on the difference in the costs of building and operating generators with technologies A and B, as well as other factors such as the load shape, the lowest-cost method for developing additional generation to meet increases in load might be to build only generators that use technology A, to build generators that use technology B, or to build some generators that use each technology.

If we presume for the moment that there is a need for entry and that the lowest-cost method of accommodating that need is to develop some generation using each of these technologies (i.e., that both technologies are part of the least-cost development mix), then in the long-run equilibrium, the net cost of entry—defined as the levelized cost of developing and operating a generator less the margins it earns on the sales of energy

¹ Services Tariff, at 157.



and ancillary services over and above the marginal cost of providing those services will be the same for both technologies. If not, then it would make sense to develop only generation using the lower-cost technology, until such time as the net cost of entry for that generation technology is driven up, due to decreasing energy and ancillary services margins, to the point where the net cost of entry for that technology is equal to the net cost of entry for the other technology. And that means that, at least in principle, one can estimate the net cost of entry by assessing the levelized cost of developing either technology. In practice, of course, it may be easier to assess the net cost of entry for one of the technologies than for the other, and in that case it would make sense to assess the net cost of entry for the technology for which that parameter can be most easily estimated. It is the belief that it will be easiest to estimate the levelized cost of entry be performed for a gas turbine.

However, it is only appropriate to use the net cost of entry associated with a given technology to estimate the net cost of entry for the market if that technology would be developed as part of the least-cost way of providing new generation to meet increases in demand. And, as noted above, the existence of multiple generating technologies does not automatically imply that both generating technologies would continue to be developed in the long-run equilibrium. If we assume, for example, that technology A is only slightly more expensive to build than technology B, but is far cheaper to operate, the least-cost solution might be not to build *any* generation using technology B. In that case, an assessment of the net cost of entry in the market that is based upon the levelized cost of developing generation that uses technology B would be inaccurate. Similarly, if technology A is far more expensive to build than technology B, but and is only slightly cheaper to operate, the least-cost solution might be not to build *any* generation using technology B, but and is only slightly cheaper to operate, the least-cost solution might be not to build *any* generation using technology A. If so, the net cost of entry in the market should not be based on data derived from technology A.

THE SOLUTION

The reliance in the tariff and the RFP upon using the levelized cost of a gas turbine to estimate the net cost of entry implicitly assumes that gas turbines will be part of the least-cost development mix in the NYCA. They might be, but then again, they might not be. In order to assess the net cost of entry into the market properly, the RFP should call for the consultant to assess which generating technologies would be part of the least-cost development mix, and, if the consultant concludes that a gas turbine would *not* be part of the least-cost development mix, then the RFP should ask the consultant to develop an estimate of the net cost of entry using a generation technology that is part of the least-cost development mix, instead of using a gas turbine. The tariff should also be revised to permit the use of data for generating technologies other than gas turbines when estimating the net cost of entry in cases in which gas turbines are not part of the least-cost development mix.