DRAFT ICAP Manual Revisions for the 2005-2008 ICAP Demand Curve Adjustments for January 27, 2005 ICAP Working Group Meeting

5.5. Demand Curve and Adjustments

Three (3) ICAP Demand Curves will be established: one to determine the locational component of LSE Unforced Capacity Obligations for the New York City Locality, one to determine the locational component of LSE Unforced Capacity Obligations for the Long Island Locality and one to determine the total LSE Unforced Capacity Obligations for all LSEs. Each ICAP Demand Curve is set at a point based upon the localized, levelized cost of a gas turbine at the NYCA Minimum Installed Capacity Requirement, as applicable, and associated Energy and Ancillary Services revenue <u>offsets</u>. The ICAP Demand Curves will are to be phased in over three (3) Capability Years beginning in 2003 and will be adjusted in subsequent three year periods in accordanace with Section 5.6, below.

Each ICAP Demand Curve is a straight line passing through two points; (a) one point based on the localized, levelized cost of a gas turbine, taking into account associated Energy and Ancillary Services revenue offsets (the annual Reference Value), and the NYCA Minimum Installed Capacity Requirement or the Locational Minimum Installed Capacity Requirement, as applicable and (ii) the second point at the Installed Capacity requirement level where the Installed Capacity value declines to zero (Zero Crossing Point). The slope of the curve, so defined, reflects the value of capacity as a function of the Installed Capacity requirement level. The Demand Curves also continues upward to the left until they reach a value of 1.5 times the fixed costs of a new gas turbine, thus establishing the maximum clearing prices for LSEs and suppliers.

The NYCA Minimum Installed Capacity Requirement is determined by the NYISOThe curves are derived from: (a) a point defined by the minimum ICAP requirement as set afterby the New York State Reliability Council sets the NYCA Installed Reserve Margin and the NYISO determines the Locational Minimum Installed Capacity Requirement., and the cost of new peaking generation less an offset for net energy and aneillary services revenues (the Annual Reference Value); and (b) a point at which the ICAP requirement declines to zero (Zero Crossing Point) that reflects the declining value of capacity reserves and an appropriate slope for the demand curve.⁴ The Annual Reference Value is determined by an estimate of the annual capital and fixed O&M costs, including a return on investment, to construct a typical new peaking unit (i.e., a simple cycle gas turbine plant), less an offset for projected Energy and Ancillary Services revenues, net of fuel expense, that a new

¹ The Demand Curves also continues upward to the left until they reach a value of <u>1.5 times the fixed costs of a new peaking unit, thus establishing the maximum clearing</u> prices for LSEs and suppliers.

peaking unit could expect to earn in the New York markets. The revenue offset is set at a fixed amount, rather than an amount adjusted to equal actual energy and ancillary services revenues. The NYCA revenue offset includes an adjustment for the differences in available capacity between the summer and winter seasons, both from internal generation and from imports or exports of capacity. The annual Reference Value is translated to a monthly ICAP Reference Point price for each Demand Curve by using the ratio of winter-to-summer capacity that is available from the NYCA market.

Each ICAP Demand Curve shall be established within the following fixed, annualmonthly ICAP parameters, <u>thatwhich willwhich shall</u> be translated into dollars per kilowatt-year of Unforced Capacity <u>basiterms</u> in accordance with ISO Procedures.

	Year 1	Year 2	
	(Ends April 30, 2004)	(Begins May 1, 2004)	
	\$/kW-year of ICAP	\$/kW-year of ICAP	
Total	\$56. <u>24 @ 100%</u>	\$ 67.49 @ 100%-	
	\$0.00 @ 112%	\$0.00 @ 112%	
ш	\$104.37 <u>@</u> 100%-	\$1 <u>23.94@100%</u>	
	\$0.00 @ 118% -	\$0.00 @ 118% -	
NYC	\$127.89 @ 100%-	\$151.14 <u>@100%</u>	
	\$0.00 @ 118% -	\$0.00 @ 118% -	

NOTE: All percentages are in terms of the applicable NYCA Minimum Installed Capacity Requirement and Locational Minimum Installed Capacity Requirement.

NOTE: All annual dollar values will be translated into monthly values by dividing by twelve (12) and rounding to the nearest cent.

NOTE: The ICAP Demand Curves for each monthly ICAP Spot Market Auction are posted under the applicable Capability Period on the NYISO website at <u>www.nyiso.com/markets/icapinfe.html.</u>

	Capability Year	Capability Year	Capability Year	Capability Year	
	<u>5/1/2004</u>	<u>5/1/2005</u>	<u>5/1/2006</u>	<u>5/1/2007</u>	
	<u>to</u>	<u>to</u>	<u>to</u>	<u>to</u>	
	4/30/2005	4/30/2006	4/30/2007	4/30/2008	
\$/kW-month of ICAP					
<u>NYCA</u>	<u>\$5.62 @ 100%</u>	<u>\$6.78 @ 100%</u>	<u>\$6.98 @ 100%</u>	<u>\$7.19 @ 100%</u>	
	\$0.00 @ 112%	\$0.00 @ 112%	\$0.00 @ 112%	\$0.00 @ 112%	
<u>NYC</u>	<u>\$12.60 @</u>	<u>\$13.70@</u>	<u>\$14.11 @</u>	<u>\$14.54 @</u>	
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	
	<u>\$0.00 @ 118%</u>	<u>\$0.00 @ 118%</u>	<u>\$0.00 @ 118%</u>	<u>\$0.00 @ 118%</u>	

Ш	<u>\$10.33 @</u> <u>100%</u>	<u>\$12.52 @</u> <u>100%</u>	<u>\$12.90 @</u> <u>100%</u>	<u>\$13.28 @</u> 100%		
NOTE: AI		<u>\$0.00 @ 118%</u> n terms of the app				
Capacity Requirement and Locational Minimum Installed Capacity Requirement.						

In the thirdsubsequent years, the costs assigned by the ICAP Demand Curves to the NYCA Minimum Installed Capacity Requirement and each of the Locational Minimum Installed Capacity Requirements will be defined by the results of the independent review conducted pursuant to this-Section 5.14.1(b) of the NYISO Services Tariff. The respective point at which each Demand Curve crosses zero, expressed in terms of a percentage of the NYCA Minimum Installed Capacity Requirement or each of the Locational Minimum Installed Capacity Requirement or each of the Locational Minimum Installed Capacity Requirements, as applicable, will be fixed through the 2005/2006 Capability Year. These monthly dollar figures will also be translated each year into dollars per kilowatt year of Unforced Capacity terms in accordance with ISO Procedures and will be posted under the applicable period on the NYISO website.

The monthly ICAP based Reference Points shown in the table above are converted to UCAP based Reference Points using a Ceapability Pperiod-specific ICAP to UCAP translation factor. The UCAP based Reference Point (\$/kW -Month) equals the ICAP based Reference Point (\$/kW -Month) equals the ICAP based Reference Point (\$/kW -Month) divided by one minus the ICAP/UCAP translation factor. The ICAP/UCAP translation factor equals one minus the EFORd for the appropriate location (i.e. NYCA, New York City or Long Island). The EFORd used is the average value of the six (6) most recent 12-month rolling average EFORds of all resources in the NYCA or respective location.

[These last two paragraphs should probably be switched]

5.6. Periodic Independent Review

Except as provided in the previous Section, a<u>An</u> periodic-independent review of the ICAP Demand Curves will be performed every three (3) years to determine whether the parameters of the ICAP Demand Curves should be adjusted. Among other criteria, the review will determine the current localized levelized embedded cost of gas turbines in each NYCA Locality and the Rest of State and associated Energy and Ancillary Services revenues.

Each periodic independent review, which will include stakeholder input, will be completed by <u>NovemberSeptember [July?</u>] 1-for the subsequent Capability Year, except the first periodic independent review, which will be concluded by December 31, 2004. The first periodic review will be initiated immediately following the Summer 2003 Capability Period, and the recommendations will be received not later than December 31, 2004 in time to determine the ICAP Demand Curves to be applied for the 2005-2006three subsequent Capability Years.

Once these recommendations independent review is are received, it they shall be issuedprovided to stakeholders and the New York State Public Service Commission ("PSC"), who shall be given an opportunity to provide input to the NYISO concerning the review. Upon consideration of each review and input thereon from stakeholders and the PSC, but prior to NYISO Board approval, the NYISO shall issue three (3) proposed ICAP Demand Curves.

Any stakeholder, including the PSC, shall have thirty (30) days within which to request an opportunity to provide the NYISO Board with supplemental information for its consideration when acting on the proposed ICAP Demand Curves. Upon receipt of such a request, a NYISO Board subcommittee shall be convened, upon notice to all parties, to review filed information and to hear oral arguments on the issues that have been raised.

After considering the proposed ICAP Demand Curves and any comments related thereto, the NYISO Board shall issue three (3) final ICAP Demand Curves and shall file them for approval at FERC. Once the ICAP Demand Curves have been approved by FERC, they shall remain binding for the 3-year period until the next review, absent exigent circumstances.