COMMONWEALTH OF MASSACHUSETTS

APPELLATE TAX BOARD

HOPKINTON LNG CORPORATION D/B/A EVERSOURCE ENERGY	**v.**	**BOARD OF ASSESSORS OF THE TOWN OF HOPKINTON**
Docket Nos. F325006, F325007, F326297, F326298, F329164, F329165		Promulgated: June 21, 2021

These are appeals filed under the formal procedure pursuant to G.L. c. 58A, § 7 and G.L. c. 59, §§ 64 and 65, from the refusal of the Board of Assessors of the Town of Hopkinton ("assessors" or "appellee"), to abate taxes on certain real estate owned by and assessed to Hopkinton LNG Corporation d/b/a Eversource Energy ("appellant") for fiscal years 2014, 2015, and 2016 ("fiscal years at issue").

Commissioner Elliott heard these appeals. Chairman Hammond and Commissioners Rose, Good, and Metzer joined him in the decisions for the appellee.

These findings of fact and report are made pursuant to a request by the appellant under G.L. c. 58A, § 13 and 831 CMR 1.32.

Daniel J. Finnegan, Esq. and *Michael Roundy*, Esq. for the appellant.

Donna M. Brewer, Esq., *Rebekah Lacey*, Esq., and *Katherine E. Stock*, Esq. for the appellee.

FINDINGS OF FACT AND REPORT

Based on an Agreed Statement of Facts as well as testimony and evidence submitted at the hearing of these appeals, the Appellate Tax Board ("Board") made the following findings of fact.

These appeals concern the taxation of two parcels of real estate in the Town of Hopkinton, a 25.2-acre parcel located at 52 Wilson Street and a 51.5-acre parcel located at 55 Wilson Street (collectively, the "subject properties"). The subject properties are improved with a natural gas liquefaction and vaporization facility ("subject facility"). The vaporization and liquefaction equipment as well as equipment and buildings needed to process and distribute the gas are located at 52 Wilson Street. Three cryogenic storage tanks and truck-loading and unloading facilities are located at 55 Wilson Street.

The appellant is an indirect, wholly owned subsidiary of Eversource Energy. NSTAR, another indirect, wholly owned subsidiary of Eversource Energy, is the primary user of the services provided by the appellant at the subject properties. NSTAR is a local distribution company ("LDC") whose job is to deliver gas to the end user, or customer. NSTAR owns all the gas stored at the subject facility.

Relevant jurisdictional information is summarized in the following chart:

Fiscal year	Assessed value	Taxes timely paid?	Tax amount Tax rate	Abatement filed	Date denied	Petition filed with Board
2014	$ 8,610,524 52 Wilson St.	Y	$151,803.54 $17.63	01/31/2014	04/30/2014[1]	07/18/2014
	$45,518,264 55 Wilson St.	Y	$802,486.99 $17.63	01/31/2014	04/30/2014[2]	07/18/2014
2015	$ 8,610,524 52 Wilson St.	Y	$154,645.01 $17.96	01/28/2015	02/24/2015	05/15/2015
	$45,518,264 55 Wilson St.	Y	$817,508.02 $17.96	01/28/2015	02/24/2015	05/15/2015
2016	$ 8,199,036 52 Wilson St.	Y	$139,629.58 $17.03	01/28/2016	02/04/2016	04/19/2016
	$45,518,264 55 Wilson St.	Y	$775,176.04 $17.03	01/28/2016	02/04/2016	04/19/2016

The subject facility's three cryogenic storage tanks each have the capacity to hold one billion cubic feet of vapor equivalent liquified natural gas ("LNG"). The subject facility is known as a "peak-shaving" facility because it mitigates or "shaves" the peak cost of natural gas by storing gas for future use on the highest heating-demand days in the winter. The subject facility liquifies natural gas and stores it as LNG in the summer months and vaporizes the LNG as needed to meet demand in the colder months. In this manner, the subject facility enables NSTAR to supply its customers with gas that was previously purchased at a lower price, thereby avoiding purchases of natural gas on the spot

[1] While the notice of abatement determination gave a date of May 2, 2014 for the denial, the actual date of deemed denial was April 30, 2014.
[2] See note 1.

market when demand, and thus prices, are highest. In addition to liquefying and vaporizing, the subject facility can also distribute LNG by truck to another storage facility owned by the appellant in Acushnet, Massachusetts.

At issue in these appeals was the value of improvements at the subject properties, which included building components, piping systems, three cryogenic tanks, and other associated components that were part of the subject facility. The parties agreed that the land portion of the subject properties were assessed properly at $4,818,800. The value of the personal property at the subject facility was not at issue.

The appellant presented its case through the testimony of the following witnesses: James Davis, the Director of Gas System Operations for Eversource Energy; Thomas Quine, P.E., who was qualified as an expert in the engineering and construction of LNG facilities; and Ann Bulkley, an appraiser with Concentric Energy Advisors, whom the Board qualified as an expert in the appraisal of LNG facilities.

Mr. Davis testified to the function of the subject facility and its importance to NSTAR's business of supplying energy. He explained that NSTAR, as a gas distributer that services rate payers, is regulated by the Department of Public Utilities ("DPU"), meaning that the rates that it charges customers, as well as the contracts for its gas purchases, must meet approval by DPU. There

is no production of natural gas in New England. The gas used in New England is delivered to the region through interstate pipeline deliveries and overseas shipments. The subject facility receives gas for liquefaction from two interstate natural gas pipelines - Algonquin Gas Transmission and Tennessee Gas Pipeline.

Mr. Davis testified that in 2012, the energy supply department of Eversource voiced concerns about future reliability of the subject facility based on its age. Eversource thus commissioned a study to determine whether investments might be warranted to maintain the subject facility's reliability over the future. Mr. Davis explained that a study by Fuss & O'Neill was commissioned because NSTAR had applied to the DPU for approval of a new affiliate contract between itself and the appellant, and the study was required to support the resulting rates that would be charged to consumers. The Fuss & O'Neill report opined that much of the infrastructure for the subject facility was designed for a life expectancy of about 40 years, so that the tanks were approaching the end of their expected life. It recommended about $62,000,000 of expenditures to preserve the subject facility and enable it to continue to operate. Mr. Davis testified that a major recommended expenditure was the replacement of the pre-treatment/liquefaction system, at an estimated cost of $30,000,000.

The Fuss & O'Neill report also recommended that a further, more specialized study be performed, a Front-End Engineering

Design study (FEED). The resulting FEED study dated May 27, 2014 and performed by CH-IV International ("CH-IV"), an independent firm that specializes in LNG facilities, reiterated many of the replacements, upgrades, and refurbishments recommended in the Fuss & O'Neill study. CH-IV's conclusion was that $200,000,000 would be required to maintain the subject facility, as well as the Acushnet property that was also owned by the appellant. Thus, Mr. Davis concluded, there were two studies performed contemporaneously with the valuation dates at issue, which indicated that millions of dollars of refurbishments, repairs, and replacements were needed to maintain the subject facility.

On cross examination, Mr. Davis admitted that the investments recommended by the Fuss & O'Neill report were for replacement of the liquefaction and vaporization systems; none were for the replacement or refurbishment of the three cryogenic tanks. The CH-IV study likewise did not identify any upgrades, replacements, or improvements to any of the three cryogenic tanks. Mr. Davis further admitted there were no plans as of the date of the hearing to replace the subject facility's three tanks, even though they were close to 50 years old, thus surpassing their 40-year life expectancy. One of the three tanks was, at the time of the hearing, temporarily out of commission while being repaired for a thermal anomaly. However, Mr. Davis admitted that the tanks in general

were still operating and thus in good condition, as they could not be operating otherwise per DPU regulations.

Mr. Davis further acknowledged that, because it is owned by a subsidiary of Eversource Energy and under a supplier contract with NSTAR, any sale of the subject facility must be approved by DPU. The appellee presented Mr. Davis with a transcript of his testimony from a DPU hearing in 2014, which was conducted as part of the approval process for the renewed gas-service agreement between the appellant and NSTAR. Concerning the subject facility, Mr. Davis had testified: "The plants are vital components of the gas resource portfolio," and "there is a critical need to ensure continued operation on a safe and reliable basis for NSTAR Gas customers over the long term."

The Board next heard the testimony of Mr. Quine, an engineer with extensive experience in the LNG industry, particularly in the construction of LNG storage tanks. Mr. Quine also submitted a cost-estimate report, which was included as a supplement to the appellant's appraisal report that will be discussed below. Mr. Quine's report indicated that the demand for natural gas in New England had increased since the construction of the subject facility. His report stated, "[t]he Existing Facility is of critical importance to the gas local distribution system, providing as much as 45 percent of total send-out requirement on a winter peak day."

Mr. Quine's report provided estimated costs to construct various components of an LNG facility to replace the subject facility. He testified that his cost estimates for constructing a replacement LNG facility were based upon his direct experience with building such facilities, working with the vendors who construct them, and getting the actual pricing from such vendors. Mr. Quine explained that the subject facility's first two tanks, tanks A and B, were placed into service in 1971, and tank C was designed and built in 1974. Mr. Quine opined that it would be unlikely that the subject facility would be built today because the tanks were not in keeping with more modern federal regulations that went into effect after 2015.

Mr. Quine's report presented two scenarios for replacement of the subject facility: (1) replacement to 2015 standards with a single large tank; or (2) replacement in kind with three smaller tanks. Mr. Quine estimated the capital costs at $404,000,000 for the single-tank option and $585,000,000 for the three-tank option. Mr. Quine opined that, if a company were to replace the tanks at the subject facility, it would most probably choose the first option, a single large tank, the less expensive and more accepted option under current standards. Mr. Quine admitted that the likelihood of an owner expending the money needed for the recommended improvements was directly related to its assurance of sales income from its stored LNG. When asked whether a merchant

buyer without a contractual affiliation with an LDC would undertake the improvements mentioned in the Fuss & O'Neill report, Mr. Quine responded, "[T]hey're not going to invest unless they have a customer who signs up for a 20-year contract because I know I would not do it."

Mr. Quine also testified that, in the absence of a new pipeline, which he did not see forthcoming, facilities like the subject properties that can store gas for future use were a necessary part of the energy infrastructure in New England to meet the needs of gas utility customers. He further opined that, if it could not have access to the gas from peak-shaving facilities like the subject facility, NSTAR either would face shortages on the coldest days of the year or would refuse to service new customers, thus raising significant doubts whether DPU would approve of NSTAR discontinuing its contract with the appellant.

The appellant's third and final witness was its valuation expert, Ms. Bulkley, who also submitted an appraisal report (the "Concentric Appraisal Report"). Ms. Bulkley testified to the origin of the subject facility. She explained that the subject facility was constructed to be used by NSTAR's predecessor gas utility, Worcester Gas and Light Company ("WGLC"). The subject facility was built between 1967 and 1975 and has been continuously contracted to NSTAR or its predecessor, WGLC since 1971. Ms. Bulkley's appraisal report highlighted the intrinsic link between

the subject facility and its contracts with NSTAR or its predecessor: "[A]bsent the contract between the HOPCO and WGLC, there is no evidence that the Facility would have been constructed." The Concentric Appraisal Report further noted the increase in demand for natural gas in New England since the subject facility first came online. This demand extended beyond home heating and included gas needed for hot water, cooking, and other residential and commercial processes like electricity generation.

Ms. Bulkley testified that, when full, the three cryogenic tanks at the subject properties contained an approximately ten-day supply of LNG that could be vaporized or distributed through the pipelines. Thus, when operating at its maximum potential, the entire stock of LNG stored at the subject facility was a ten-day supply.

The Concentric Appraisal Report included key operating statistics from the subject facility. Between the years 2011 through 2015, the vaporization rate at the subject facility ranged from a high of 1,933,196 Mcf[3] to a low of 612,072 Mcf, demonstrating that the number of peak energy days could vary dramatically from one winter to the next, making LNG usage unpredictable.

Ms. Bulkley testified that, as a regulated utility, any agreement involving NSTAR's purchase of gas must be reviewed by

[3] Mcf refers to one thousand cubic feet.

DPU and would only be approved if deemed prudent to NSTAR's rate payers. She further testified that, when a rate-regulated utility purchases gas at a low price during off-peak times, the benefit is reaped directly by the customer: "[t]he utility doesn't make a return on gas supply at all. It's just a straight pass through to customers."

Ms. Bulkley opined that the highest and best use for the subject properties was their continued use as a peak-shaving natural gas facility. However, Ms. Bulkley believed that a significant capital investment was required for continued operation of the subject facility, as documented by the Fuss & O'Neill and CH-IV studies. The operation agreement between the appellant and NSTAR in effect during the fiscal years at issue was the 1986 Consolidated Agreement. Ms. Bulkley testified that this agreement provided a "cost plus" structure, which reimbursed the operating costs plus a fixed profit margin, but in her opinion, it would not include the significant capital investments that she believed were necessary as of the valuation dates to maintain safe, reliable, and efficient future operation of the subject facility. Therefore, Ms. Bulkley asserted that the value of the subject properties could not be reasonably estimated under the assumption that the subject facility would remain fully contracted to NSTAR. Instead, Ms. Bulkley contended that the highest and best use of the subject facility would be ownership and operation by an

unregulated, merchant buyer that could recoup the value of these significant operating expenses through its sales of LNG on the open market.

Ms. Bulkley next considered the value of the subject properties using the three main valuation approaches: income-capitalization approach; cost approach; and sales-comparison approach. She determined that the income-capitalization approach was the most reliable indicator of value for the subject properties, with the cost approach as a secondary indicator that she used to reconcile her final opinions of value. Ms. Bulkley did not fully develop a sales-comparison valuation, finding that there were not enough comparable sales upon which to develop an analysis. Ms. Bulkley relied on Mr. Quine to provide information regarding the engineering aspects for her cost-approach analysis and other technical information about the subject facility used in her income-capitalization approach.

A key feature of Ms. Bulkley's income-capitalization analysis was her assumption that a merchant facility operating in the wholesale natural gas market would have as its primary source of revenue the sale of vaporized gas to LDCs during peak usage days when LDCs could not meet their demand. As Ms. Bulkley testified, a merchant facility "only has approximately ten days' worth of storage, so the goal is to use that to capture those peak days . . . that would be where you make your money." However, Ms. Bulkley

testified that she used an average winter price, rather than the absolute peak price, to calculate her potential revenue, opining that using just peak prices would overstate revenue, as peak days could be unpredictable.

In calculating expenses, Ms. Bulkley included the significant capital expenditures identified by Fuss & O'Neill and the FEED Study as necessary to continue the operation of the subject facility. Ms. Bulkley opined that these expenses were properly deducted against a merchant owner's income, because the capital expenditures were necessary to keep the subject facility running and therefore to secure its income stream. She further testified that the capital expenditures had to be accounted for to avoid artificially inflating the subject properties' fair market value.

Ms. Bulkley testified that, in developing her capitalization rate, she developed weighted average cost of capital ("WACC") figures for each fiscal year based upon costs of capital for companies engaged in the gas storage business, as determined by the California State Board of Equalization's annual Capitalization Rate Study. She testified that these WACC figures most accurately reflect the risks associated with operating the subject facility on a merchant basis.

Ms. Bulkley prepared both a direct-capitalization analysis and a discounted-cash-flow analysis. Ms. Bulkley opined that while the direct-capitalization method is generally seen as easier to

perform, the discounted-cash-flow method allows the appraiser to more precisely model specific variations in anticipated future income and expenses. Reconciling her direct-capitalization and discounted-cash-flow approaches, Ms. Bulkley arrived at the following values applying her income-capitalization analysis: $16,000,000 for fiscal year 2014; $41,000,000 for fiscal year 2015; and $41,500,000 for fiscal year 2016. Ms. Bulkley testified that the significant jump in the value between fiscal years 2014 and 2015 was driven primarily by differences in gas forward pricing, which spiked after the very cold "polar vortex" winter of late 2013 to early 2014.

For her cost approach, Ms. Bulkley developed a replacement cost new less depreciation analysis to value the cost of replacing the subject facility based on the construction costs, schedules, and property lives provided by Mr. Quine. Ms. Bulkley agreed with Mr. Quine that a more-modern, one-tank replacement facility was the appropriate model. She then deducted amounts for physical, functional, and economic obsolescence. Specifically, for economic obsolescence, Ms. Bulkley testified that it would not be cost-effective for a prospective purchaser to build a replacement plant, because the cost to do so would exceed its anticipated income stream: "A merchant wouldn't pay more to build the plant than they actually felt the plant was worth on an income basis." She thus deducted significant amounts for economic obsolescence:

$70,465,767 for fiscal year 2014, $39,767,438 for fiscal year 2015, and $37,027,410 for fiscal year 2016. Ms. Bulkley's cost-approach analysis resulted in value indications for the three years of $13,117,000 for fiscal year 2014, $42,617,000 for fiscal year 2015, and $42,117,000 for fiscal year 2016.

Finally, Ms. Bulkley considered a sales-comparison approach. She identified five potentially comparable sales of operating LNG peak-shaving facilities occurring between May 2001 and July 2014. Of the three sales that reported sale revenues, one was in Pennsylvania and the other two were in New England - Connecticut and Rhode Island. Ms. Bulkley opined that these facilities were not sufficiently comparable to the subject facility to provide meaningful comparison, and she thus did not rely on the sales-comparison method for evaluating the subject facility.

Upon reconciling the values that she obtained from her income-capitalization and cost-approach analyses, placing primary weight on the values obtained through her income-capitalization analysis, Ms. Bulkley arrived at her final opinions of value for the subject properties, excluding the land, for the fiscal years at issue as follows:

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FY2014
52 Wilson Street: $ 1,800,000
55 Wilson Street: $ 9,400,000
Total: $11,200,000

FY2015
52 Wilson Street: $ 3,300,000
55 Wilson Street: $25,000,000
Total: $28,300,000

FY2016
52 Wilson Street: $ 3,200,000
55 Wilson Street: $25,000,000
Total: $28,200,000

After the appellant concluded its presentation, the appellee presented its case through the testimony and appraisal report of George E. Sansoucy, P.E., a certified general appraiser and engineer whom the Board qualified as an expert on the valuation of all types of utility energy assets including natural gas liquefaction, storage, and gasification facilities. Mr. Sansoucy was also previously hired by the assessors to prepare appraisal reports for the subject properties for assessment purposes. Specifically, Mr. Sansoucy prepared assessment appraisals in 2013 (for fiscal year 2014) and again in 2015 (for fiscal year 2016).

Mr. Sansoucy testified to the importance of the subject properties to NSTAR's operations. He explained that, while the subject properties' original purpose as a peak-shaving facility was to mitigate the price spikes of winter gas, the subject facility had since become more vital to NSTAR's infrastructure, as the increased demand for natural gas in New England currently

exceeds pipeline capacity. His appraisal report cited to testimony in DPU Proceeding 14-64 on March 24, 2014 from Edna Karanian, the Director of Gas Supply for Northeast Utilities Service Company, who was responsible for gas supply operations for NSTAR. In advocating for the importance of the subject facility, Ms. Karanian testified that winter gas shortages could not be made up by pipeline imports or marine terminals: "There is no resource available that would replace the volume of capacity and gas supply required by NSTAR Gas and supplied by HOPCO in the winter season." She further testified that the subject facility was one of only five peak-shaving facilities in New England that had both liquefaction and vaporization capability,[4] as well as the unique ability to inject natural gas from storage into NSTAR's pipeline system, making it a critical part of NSTAR's infrastructure. Mr. Sansoucy's appraisal report also included the Initial Brief of NSTAR submitted for that proceeding, which maintained that various conditions within the LNG domestic and foreign markets had "rendered the secondary market for imported LNG less available causing extreme price volatility in the New England spot market." Therefore, without the subject facility, NSTAR would be subject to unpredictable swings in pricing and allocation of the limited supply of gas to its customer base.

[4] At the Board hearing, Mr. Davis testified that, while the subject facility could liquify and vaporize, it could not perform both operations at the same time and required about a two-week switch-off period between operations.

Mr. Sansoucy further pointed out that the subject facility had always contracted with an LDC for the sale of gas. In analyzing the highest and best use of the subject facility, Mr. Sansoucy maintained that an entity affiliated with a regulated LDC was the buyer most likely to realize a maximally productive use of the subject properties. Conversely, he opined that an independent merchant buyer, unaffiliated with a regulated LDC to whom it could guarantee a sale of gas, was the least likely purchaser to make a maximally productive use of the subject properties. He highlighted the risk involved in having to purchase gas in the summer to liquify and store for months while receiving no income, and then having to rely on the ability to sell a ten-day supply if the needs of the utility buyers exceeded their supplies. Additionally, because it is currently under contract with a regulated utility, the DPU would have to approve the termination of the appellant's contract with NSTAR, presenting what Mr. Sansoucy testified was a "significant obstacle" to the merchant-owner scenario – a scenario based on the "extraordinary assumption" that the subject facility could be sold to a merchant. Because of the unlikelihood that Eversource Energy would agree to sell this asset and that a merchant buyer would be willing to take a risk of ownership without a guarantee of sale of LNG on the open market, Mr. Sansoucy opined that a critical error in the Concentric Appraisal Report was its

valuation of the subject properties as though their highest and best use was their ownership and operation by a merchant buyer.

Mr. Sansoucy further testified that the subject facility was a special purpose property that was not constructed or maintained primarily as an income-producing property but instead as a cost-avoidance asset. Mr. Sansoucy maintained that, because producing income had not been shown to be a primary consideration for the subject facility, the income-capitalization approach was not an appropriate method for valuing the subject properties.

Mr. Sansoucy further disagreed with Ms. Bulkley's deduction of the significant capital expenditures identified by Fuss & O'Neill and the FEED Study under her income-approach analysis. Mr. Sansoucy maintained that the identified capital expenditures were for replacements and upgrades to the liquefaction and vaporization equipment, which were personal property. He explained that personal property has a shorter lifespan than real property, that it is fully intended to be used and then replaced, and that real and personal property thus have different depreciation rates recognizing their varying lifespans. Furthermore, Mr. Sansoucy testified that personal property is separately valued from real property, providing an opportunity to take deductions against the personal-property valuation. He thus opined that taking personal-property deductions against real property essentially amounted to "double dipping."

Mr. Sansoucy found error with Ms. Bulkley deducting these capital expenditures but then ignoring the added value to the subject properties that would result from the improvements. Mr. Sansoucy testified that in scrutinizing the Fuss & O'Neill study, he determined that about 90 percent of the recommended expenditures were for modernization upgrades to the subject facility, items that Mr. Sansoucy explained would add "tremendous value" to the subject properties. Mr. Sansoucy reasoned that deducting the cost of these capital improvements but ignoring the added value to the subject facility artificially deflated the value that would be added by 90 percent of the recommended capital expenditures.

Mr. Sansoucy criticized Ms. Bulkley's capitalization rates, which were designed for merchant-owned utility businesses. As he disagreed with Ms. Bulkley's premise that ownership by a merchant would be the highest and best use of the subject properties, Mr. Sansoucy likewise criticized these capitalization rates. Mr. Sansoucy testified that a much lower capitalization rate, based upon the cost of capital typical for a regulated utility, would be appropriate in valuing the subject properties, explaining that the subject facility was "for all practical purposes an asset of NSTAR." Mr. Sansoucy maintained that the appellant did not prove a highest and best use in the hands of a merchant owner. Therefore, an analysis that relied upon a merchant owner resulted in a value

that was far lower than warranted by the realities of the subject properties' importance to NSTAR.

Mr. Sansoucy completed his own appraisal report for the subject properties for purposes of the instant appeals. He performed cost-approach and sales-comparison analyses, and he relied upon those two approaches equally.

In distinguishing his cost approach from that of the Concentric Appraisal Report, Mr. Sansoucy maintained that Ms. Bulkley's substantial deduction for economic obsolescence was unwarranted, because there had been no showing that outside conditions had rendered the subject properties less valuable. He cited again to the brief that NSTAR submitted for the DPU hearing, in which NSTAR strenuously advocated the critical importance of the subject properties to its energy infrastructure. This brief stated, in part:

> [T]he universally accepted expectation is that demand for natural gas in New England will continue to grow over the foreseeable future, which in turn will provide the impetus for continued expansion of the natural gas market. [citation omitted] Although demand in New England is high and increasing, available supplies of natural gas are relatively low. [citation omitted] . . . Regional LDCs have become heavily reliant on their LNG peaking facilities to meet a substantial portion of their peak-day requirements, which has mitigated some of [the market's] volatility. [citation omitted]

Mr. Sansoucy's report further cited to the DPU hearing where Ms. Karanian testified that: "The HOPCO facilities are a critical (and

substantial) component of the NSTAR gas resource portfolio and there is no feasible or economically viable alternative for meeting customer needs without these facilities." Mr. Sansoucy's final values for his cost-approach analysis were $70,000,000 for fiscal year 2014, $69,600,000 for fiscal year 2015, and $69,900,000 for fiscal year 2016.

For his sales-comparison analysis, Mr. Sansoucy relied on a sale of a Connecticut facility, a special-purpose property that included an LNG tank built in 1972 with both liquefaction and vaporization capabilities that he found to be very similar to the subject facility in age, capabilities, and capacity. This property was sold in August 2014 for $20,321,000. Ms. Bulkley had reviewed this sale but ultimately did not develop a sales-comparison analysis. Mr. Sansoucy disagreed with Ms. Bulkley's determination that the property was too dissimilar from the subject properties to provide probative evidence of value. Applying appropriate adjustments for location, physical characteristics, and conditions, Mr. Sansoucy arrived at adjusted sales prices of $74,700,000 for fiscal year 2014, $76,000,000 for fiscal year 2015, and $79,200,000 for fiscal year 2016.

Mr. Sansoucy reconciled his two values derived from the cost-approach and the sales-approach methods and arrived at the following final opinion of values: $77,168,800 for fiscal year 2014; $77,168,800 for fiscal year 2015; and $83,568,800 for fiscal

year 2016. These values exceeded the assessed values for the subject properties for each fiscal year at issue.

The values developed for the hearing were significantly higher than the initial values that Mr. Sansoucy had developed for assessment purposes, by about $25,000,000 to $30,000,000. Mr. Sansoucy testified that this discrepancy resulted because he had had minimal information and knowledge of the subject facility when he developed the assessment appraisals. He explained that the subject facility was deemed "critical energy infrastructure," a federal designation instituted post-September 11, 2001 to protect certain critical energy information from leaking to hostile parties. However, Mr. Sansoucy testified that once he eventually was given access to a full inspection, as well as drawings, plans and the specifications of the subject facility for the hearing appraisal, he was able to develop a more complete opinion of value.

Based on the evidence of record, the Board found, first and foremost, that the appellant failed to meet its burden of proving that the highest and best use of the subject properties was as a merchant-owned facility. As testified to at the Board hearing by Mr. Davis, Mr. Quine, and Ms. Bulkley, as well as at the DPU hearing by Ms. Karanian, the subject facility is of critical importance to the operations of NSTAR during the New England winter, providing up to 45 percent of the gas needed to sustain heat to customers on the coldest days. Mr. Quine even opined that,

without peak-shaving facilities like the subject facility, NSTAR would most likely face shortages on the coldest days of urgent need for customers, or it would refuse to service new customers. Moreover, because it was an asset of Eversource Energy, a regulated utility, any sale of the facility would need to be approved by DPU. The Board found credible Mr. Sansoucy's testimony that, given the importance of the subject facility to meeting NSTAR's critical infrastructure needs and to saving costs that would otherwise be passed onto rate payers, this approval was highly unlikely.

The Board further found it highly unlikely that a merchant buyer would undertake the financial risk of purchasing the subject facility. Weighing the expense of the gas supply and any necessary capital expenses against the possibility of selling a mere 10-days-worth of LNG on the open market, the risk would be high for a merchant without a contract guaranteeing sales of its LNG. The risk to the merchant was particularly highlighted by Ms. Bulkley's testimony and chart demonstrating the dramatic fluctuation of LNG usage from one winter to the next. Therefore, the Board further found that the appellant failed to meet its burden of proving that ownership by a merchant buyer would be financially feasible or maximally productive, key criteria in a highest and best use analysis.

The Board found that ownership of the facility by a merchant was an "extraordinary assumption," which Ms. Bulkley defined in

her appraisal, consistent with Uniform Standards of Professional Appraisal Practice ("USPAP"), as "an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser's opinions or conclusions." The Board found that the assumptions required for a finding of highest and best use in the hands of a merchant were too speculative and remote, and therefore the appellant failed to meet its burden of proving the viability of that use. Since the highest and best use determination, the premise of the appellant's valuation, was erroneous, the Board found and ruled that the resulting analysis likewise was fatally flawed.

Though the Board based its decisions on the appellant's failure to prove its premises of highest and best use, the Board additionally found other key elements of the Concentric Appraisal Report to be unconvincing.

For example, with respect to the Concentric Appraisal Report's cost-approach analysis, the Board found the substantial deductions for economic obsolescence to be unwarranted. Economic obsolescence, also referred to as external obsolescence, is a category of depreciation that appraises factors external to the property that have an impact on its fair market value. These deductions are appropriate when external circumstances are expected to decrease the demand for a property in the future. The

appellant here made no such showing of expected decline in the subject facility's demand. In fact, the evidence of record established just the opposite, that NSTAR considered the subject facility to be crucial to its operations, and that its importance was likely to continue into the foreseeable future. The Board thus found the substantial deductions for economic obsolescence to be inappropriate.

Moreover, having concluded that the highest and best use of the subject facility was not in the hands of a merchant owner but a regulated utility, the Board found that the subject facility was a cost-saving, not an income-producing, asset to NSTAR. As Ms. Bulkley explained, NSTAR's purchase of gas at off-peak times results in a direct savings to the end user: "[t]he utility doesn't make a return on gas supply at all. It's just a straight pass through to customers." The Board thus found that the income-capitalization approach was not applicable to value the subject properties.

Finally, Ms. Bulkley eschewed a sales-comparison analysis, claiming there were no sufficiently comparable sales of peak-shaving facilities. However, the Board found persuasive Mr. Sansoucy's opinion that his comparable facility from Connecticut - an LNG tank built in 1972 with both liquefaction and vaporization capabilities – was sufficiently similar to the subject facility in age, capabilities, and capacity so that its sale provided probative

evidence of the subject facility's value. The Board was more persuaded by Mr. Sansoucy's single sale of a sufficiently comparable special-purpose property than by Ms. Bulkley's inapposite income-capitalization and flawed cost-approach analyses.

Based on the record in its entirety, the Board found and ruled that the appellant failed to meet its burden of proving values for the subject properties that were lower than their assessed values for each of the fiscal years at issue. Accordingly, the Board issued decisions for the appellee in the instant appeals.

OPINION

Assessors are required to assess real estate at its fair cash value. G.L. c. 59, § 38. Fair cash value is defined as the price on which a willing seller and a willing buyer in a free and open market will agree if both are fully informed and under no compulsion. ***Boston Gas Co. v. Assessors of Boston***, 334 Mass. 549, 566 (1956).

"'The burden of proof is upon the petitioner to make out its right as [a] matter of law to abatement of the tax.'" ***Schlaiker v. Assessors of Great Barrington***, 365 Mass. 243, 245 (1974)(quoting ***Judson Freight Forwarding Co. v. Commonwealth***, 242 Mass. 47, 55 (1922)). In appeals before this Board, a taxpayer "'may present persuasive evidence of overvaluation either by exposing flaws or

errors in the assessors' method of valuation, or by introducing affirmative evidence of value which undermines the assessors' valuation.'" ***General Electric Co. v. Assessors of Lynn***, 393 Mass. 591, 600 (1984) (quoting ***Donlon v. Assessors of Holliston***, 389 Mass. 848, 855 (1983)). "[T]he board is entitled to 'presume that the valuation made by the assessors [is] valid unless the taxpayers . . . prov[e] the contrary.'" ***General Electric Co.***, 393 Mass. at 598 (quoting ***Schlaiker***, 365 Mass. at 245).

The decisions in these appeals were based on the appellant's failure to prove its premise, which was necessary to the appellant's valuation methodologies, that the highest and best use of the subject properties was in the hands of a merchant owner. The ascertainment of a property's highest and best use is a prerequisite to a valuation analysis. *See* ***Peterson v. Assessors of Boston***, 62 Mass. App. Ct. 428, 429 (2004); ***Irving Saunders Trust v. Assessors of Boston,*** 26 Mass. App. Ct. 838, 843-44 (1989). "A property's highest and best use must be legally permissible, physically possible, financially feasible, and maximally productive." ***Northshore Mall Limited Partnership v. Assessors of Peabody***, Mass. ATB Findings of Fact and Reports 2004-195, 246, *aff'd,* 63 Mass. App. Ct. 1116 (2005)(decision under Rule 1:28). In determining a property's highest and best use, consideration should be given to the purpose for which the property is adapted. ***Tennessee Gas Pipeline Co. v. Assessors of Agawam,*** Mass. ATB

Findings of Fact and Reports 2000-859, 876 (citing ***Leen v. Board of Assessors of Boston***, 345 Mass. 494, 504 (1963); ***Boston Gas***, 334 Mass. at 566). The taxpayer has the burden of proving that a property has a highest and best use different from its existing use. *See* ***Kunz v. Assessors of Middleton***, Mass. ATB Findings of Fact and Reports 2006-211, 222.

In the instant appeals, the purpose for which the subject properties were adapted was their existing use as a peak-shaving facility owned and operated by a regulated gas utility. As noted in the Concentric Appraisal Report, demand for gas in New England had increased since the subject facility first came online. Considering the demand for gas to meet customers' heating needs, and the very real threat that NSTAR would either not be able to service its customers on the coldest days or be forced to turn away new customers, the Board found the appellee raised significant and credible doubt whether DPU would approve Eversource Energy's disposing of the subject properties. Moreover, as Mr. Sansoucy explained, there is significant financial risk to a merchant utility of investing in a facility and a supply of gas for a chance to sell a ten-day supply, at most, on the open market without a guaranteed contract. This risk raises significant doubts whether ownership by a merchant would be financially feasible or maximally productive. Therefore, the Board found and ruled that the appellant's conclusion regarding the subject properties' highest

and best use as a facility owned and operated by a merchant was not supported by the evidence.

The opinion of an expert must be based on a proper foundation. ***State Tax Commission v. Assessors of Springfield***, 331 Mass. 677, 684 (1954). Ms. Bulkley founded her final opinion of value on the assumption that ownership and operation of the subject properties by a merchant was their highest and best use. However, she failed to adequately explain this "extraordinary assumption" in her appraisal report or in her testimony at the hearing, and there was insufficient evidence in the record to support it. The Board found and ruled that her resulting analysis stemming from that flawed assumption thus lacked probative value.

Beyond its flawed highest-and-best-use analysis, there were key elements of the Concentric Appraisal Report that the Board found unconvincing.

Generally, real estate valuation experts, Massachusetts courts, and this Board rely upon three approaches to determine the fair cash value of property: income capitalization, sales comparison, and cost reproduction. ***Correia v. New Bedford Redev. Auth.***, 375 Mass. 360, 362 (1978). "The board is not required to adopt any particular method of valuation." ***Pepsi-Cola Bottling Co. v. Assessors of Boston***, 397 Mass. 447, 449 (1986).

The first method Ms. Bulkley developed was the cost-approach analysis. While a cost-approach analysis could be applicable to

value special-use properties (*see* ***Blakeley v. Assessors of Boston,*** 391 Mass. 473, 477 (1984)), the Board found significant flaws in its development in the Concentric Appraisal Report. Ms. Bulkley's cost-approach analysis incorporated substantial deductions for economic obsolescence. However, the uncontroverted evidence was that the demand for gas in New England is increasing. With a new pipeline not a likely option, the Board found no evidence of market factors that would have decreased the demand for peak-shaving facilities during the relevant time period. Therefore, the Board ruled that the deductions for economic obsolescence were unwarranted. *See* Appraisal Institute, THE APPRAISAL OF REAL ESTATE, 539 (15th ed. 2020). *See also* ***Boston Gas Co. v. Board of Assessors of Boston***, 458 Mass. 715, 730 (2011) ("External obsolescence is a type of depreciation that takes account of market factors external to the property that have an impact on its fair market value, such as an economic recession that decreases demand for the property.")(citing APPRAISAL OF REAL ESTATE, 422 (13th ed. 2008)).

The Concentric Appraisal Report also included an income-capitalization analysis. This method "is frequently applied with respect to income-producing property." ***Taunton Redev. Assocs. v. Assessors of Taunton***, 393 Mass. 293, 295 (1984). The income-capitalization method "analyzes the property's capacity to generate income over a one-year period and converts the capacity into an indication of fair cash value by capitalizing the income

at a rate determined to be appropriate for the investment risk involved." ***Olympia & York State Street Co. v. Assessors of Boston***, 428 Mass. 236, 239 (1998). As it relies upon a property's earning capacity, this method is thus appropriate for income-producing property. ***Board of Assessors of Brookline v. Buehler*** 396 Mass. 520, 522 (1986). However, the subject facility has, since its inception, been intended for and used as a peak-shaving facility, the purpose of which is to "shave" the cost of energy that would otherwise be borne by NSTAR's rate payers during peak-use times. Having concluded that the appellant's highest and best use was not in the hands of a merchant operator, the subject facility was and remains an income-saving, not income-producing, property. Under these circumstances, attempting to value the subject facility with reference to a hypothetical, projected income capacity conflicts with the subject facility's fundamental purpose. Thus, the Board ruled that the income-capitalization method was not an applicable method for valuing the subject properties for the fiscal years at issue.

Finally, Ms. Bulkley did not develop a sales-comparison approach, opining that there was a lack of comparable sales upon which to rely. She did, however, find one sale of an LNG facility in Connecticut, the same sale relied upon by Mr. Sansoucy for his analysis. The Board agreed with Mr. Sansoucy's assertion that the Connecticut facility was similar to the subject facility in age,

capabilities, and capacity. The Board found that, where the subject facility is a unique, special-purpose property, the type not frequently sold on the market, Mr. Sansoucy's single-sale analysis, with a comparable and appropriately adjusted sale, was more probative evidence of the subject properties' value than Ms. Bulkley's inapposite income-capitalization analysis and flawed cost-approach analysis.

Therefore, based the evidence of record, the Board found and ruled that the appellant failed to meet its burden of proving values for the subject properties that were lower than their assessed values for the fiscal years at issue. Accordingly, the Board issued decisions for the appellee in these appeals.

THE APPELLATE TAX BOARD

By: /s/ Thomas W. Hammond
Thomas W. Hammond, Jr., Chairman

A true copy,

Attest: /s/ William J. Doherty
Clerk of the Board