

**BEFORE THE STATE OF NEW HAMPSHIRE**

**PUBLIC UTILITIES COMMISSION**

**In the matter of:** )  
**DE 15-464** )  
**PSNH Lease to NPT LLC** )

**Direct Prefiled Testimony**

**Of**

**James Brennan  
Finance Director**

**On behalf of**

**The New Hampshire Office of the Consumer Advocate**

*Dated:* **September 14, 2017**

## Table of Contents

Section I	Introduction .....	Page 3
Section II	Colliers Across-The-Fence Assumption (Adjustment #1).....	Page 11
Section III	Colliers Capitalization Rate (Adjustment #2) .....	Page 12
Section IV	Colliers Enhancement Factor (Adjustment #3) .....	Page 14
Section V	OCA Adjusted Valuations .....	Page 22
Section VI	Summary and Recommendation .....	Page 24
 Attachments		
JJB-1	Table 1: Colliers Valuation Opinions Table 2: Colliers Valuation Formulas Table 3: Colliers Valuation Components	
JJB-2	Comparable Markets Transaction, OCA research	
JJB-3	"Final Report Fair Market Value Analysis for a Fiber Optic Cable Permit in National Marine Sanctuaries", August 2002. National Oceanic and Atmospheric Administration (NOAA).	
JJB-4	"Establishing the Value of Permits for Fiber Optic Installations in National Marine Sanctuaries" May 28, 2000. The Center for Applied Research, Inc.	
JJB-5	"Methodology of Revenue-Based Rights-Of-Way Fee Estimates in Marine Sanctuaries" September 2000. KMI Corporation	
JJB-6	Advisory letter to NOAA. Robert Robinson, Senior Economist	
JJB-7	CSX Appeal	
JJB-8	"Establishing Fair Market Value for Rent" November 19, 2015. Principal Valuation LLC	
JJB-9	"Report to Vermont Agency of Transportation Right-Of-Way Section - Appraisal and Recommendation Regarding Fair Market Value Rates" September 7, 2015. Kingston Cole & Associates	
JJB-10	Value Line	
JJB-11	OCA 1-01	
JJB-12	OCA 1-11	
JJB-14	OCA 1-15	
JJB-15	OCA 1-22	
JJB-17	OCA 2-05	
JJB-18	OCA 2-07	
JJB-19	OCA 2-16	
JJB-20	OCA 2-19	
JJB-21	TS 1-05	
JJB-22	OCA 2-01	
JJB-23	OCA 1-18	
JJB-24	OCA 2-15	
JJB-25	OCA 1-12	

**SECTION I: Introduction**

**Q. Please state your name, business address and current position.**

A. My name is Jim Brennan. I am the Finance Director at the New Hampshire Office of the Consumer Advocate (OCA). My business address is 21 South Fruit Street, Suite 18, Concord, New Hampshire.

**Q. Please describe your education and professional experience.**

A. I earned a Bachelor degree from Saint Bonaventure University and an MBA in Finance at Syracuse University in 1980. I completed a nine month JP Morgan Chase (formerly Chemical Bank) MBA Management Training Program. I have completed additional courses in business, finance, software development, electric utility regulation, regulatory finance and accounting, and Smart Grid.

In my present position at the OCA I perform economic and financial analysis of utility filings across all industries, draft discovery and testimony, and provide guidance on financial policy and regulatory issues.

My business career began in banking as First Vice President at Chemical Bank, 1980-1989, with responsibilities as analyst, credit department manager, account relationships, and course designer and instructor of Risk Assessment training. I have experience managing business and technology operations. At TD Waterhouse Securities, 1995-2001, I ran the third largest brokerage statement operation on Wall Street during a period of 400% growth with responsibilities for budget, operations, Information Technology data processing and New York Stock Exchange Compliance. Waterhouse's statement was awarded #1 ranking by Smart Money during my assignment. I have experience in IT project management and software design. Experience includes: implementation of paperless technology in Waterhouse Security National Investor Clearing Corporation stock clearing

operation (2000); managing launch of an eServices web site providing on-line secure access of brokerage statements to 2.5 million Waterhouse clients (2001); designing Microsoft.NET and SQL Server based software systems for Mathematica Policy Research 2003-2006; and directing design, testing and launch of cloud based Microsoft Customer Relationship Management (CRM) applications for Southern New Hampshire University (2012-2013). I have designed and taught courses in Corporate Finance, Microsoft applications and Microsoft C# programming language.

**Q. Have you previously provided testimony before the New Hampshire Public Utility Commission?**

**A.** Yes.

**Q. In which dockets did you testify?**

**A.** I provided testimony before the Commission in the following dockets:

- DE 10-055 Unitil, Inc., rate case testimony assessing the company's smart grid investments ;
- DE 13-177 Public Service Company of New Hampshire (PSNH), testimony regarding Least Cost Integrated Resource Planning;
- DE 14-120 Public Service Company of New Hampshire (PSNH), testimony on reconciliation of the company's energy service costs;
- DW 13-130 Pennichuck Water Works, Inc., this case dealt with the company's revenue deficiency;
- DG 15-090 Northern Utilities, Inc., testimony on design of interstate pipeline refund in cost of gas rates;
- DE 11-250 Public Service Company of New Hampshire (PSNH), testimony (adopted) on investigation of Merrimack Station scrubber project cost recovery;
- DE 14-238 Public Service Company of New Hampshire (PSNH), testimony on divestiture of PSNH generation assets;
- DE 15-137 Energy Efficiency Resource Standard, testimony on utilities empowering residential customer through modern electronic data platforms;
- DE 16-384 Unitil Energy Systems Inc., testimony on company pilot to design a utility energy data sharing platform;
- DG 16-383 Liberty Utilities Granit State Electric; testimony regarding long term trend and benchmark analysis using FERC data.

**Q. Have you provided public comments to the Commission?**

1 A. Yes, I provided public comments in the following docket:

- 2 • IR 15-296 Grid Modernization, comment on definition and elements of grid  
3 modernization;

4 **Q. Please summarize the issue being addressed in this docket.**

5 A. Order No. 26,020 issued on May 24, 2017 defines the limited scope of this  
6 docket to be the review and assessment of the right-of-way ("ROW") lease  
7 to Northern Pass Transmission ("NPT"). The Commission has stressed:  
8 "Our review here, as we have consistently stated, will be about whether  
9 the terms of the proposed lease between Eversource and NPT are  
10 reasonable and in the public interest, and whether Eversource's customers  
11 are appropriately compensated by NPT for the use of Eversource's rights-  
12 of-way." *Public Service Co. of N.H.*, Order No. 26020 (May 24, 2017).

13 **Q. Please provide a high level summary of the lease transaction being**  
14 **analyzed in this docket.**

15 A. Public Service New Hampshire d/b/a Eversource Energy (referred to as  
16 PSNH and/or the Lessor) has requested approval of a 40-year ground lease  
17 agreement with Northern Pass Transmission LLC (referred to as NPT  
18 and/or the Lessee). Rent levels contained in the lease agreement are  
19 based on a 900- page appraisal performed by Colliers International  
20 (referred to here as Colliers) in 2014 and updated in 2015. Based on the  
21 terms in the Lease agreement, NPT will make annual rent payments of  
22 \$795,203 to PSNH which will be credited to customers<sup>1</sup>. PSNH will transfer  
23 rights to a corridor of 700 contiguous property interests to NPT, which

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1 Based on easement ownership interests, 4.9 percent of any lease payments will be credited to PSNH distribution customers and 93.7 percent of any lease payments will be credited in Regional Network Service and Local Network Service Transmission rates

1 will construct, own and operate the 1,090<sup>2</sup> MW Northern Pass  
2 Transmission project.

3 **Q. Please describe the relationship between NPT and PSNH and the**  
4 **relevance of this relationship to this transaction.**

5 A. PSNH and NPT are affiliated entities. Both entities are 100 percent owned  
6 and controlled, directly or indirectly, by Eversource Energy. Ref JJB-11  
7 6/17/2017 Eversource's org chart OCA 1-001. PSNH owns the land  
8 interests as an asset on its books. Ref JJB-25 OCA 1-012 and JJB-15 OCA 1-  
9 022. As the owner of these interests, PSNH had to determine the lease  
10 payment that its affiliate, NPT LLC, will pay for use of the land to build  
11 out the proposed 1,090 MW HVDC infrastructure. The economics of the  
12 NPT project, its fair market value, and the cash flow generated by the  
13 project were not available and therefore not considered in this petition.  
14 PSNH has stated company stated "fair market value of the investment over  
15 time ... is not known". Ref JJB-24 OCA 2-015 and JJB-23 OCA 1-018.

16 PSNH has adopted a static valuation approach to determine the market  
17 value and the lease rent for the NPT ROW. Specifically, PSNH relied solely  
18 on the market rent opinion contained in the Colliers appraisal. However,  
19 based on review of expert analysis and best practices, some of Colliers  
20 critical assumptions and incomplete steps, which are discussed in Section  
21 II,III and IV of my testimony, I believe Colliers has undervalued the NPT  
22 ROW.

23 The non-arm's length relationship between PSNH and NPT results in the  
24 absence of value-maximizing motivations typical to a buyer and seller or  
25 lessor or lessee during a competitive lease negotiation process. For  
26 example, I am not aware of any robust efforts by PSNH or Colliers to  
27 review "potential demand of the subject corridor beyond NPT" listed as a  
28 task in the valuation process in LaPorte's testimony. Exhibit E to PSNH

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<sup>2</sup> <http://www.northernpass.us/project-overview.htm>

Petition at Bates 174. Yet, as experts such as Principal Valuation emphasize, "[f]air market value is the probable price which a property should bring in a competitive and open market. Fair market value assumes a reasonable time is allowed for exposure in the open market."<sup>3</sup> The absence of an open competitive market is a consideration in my analysis of Colliers enhancement factor in section IV of my testimony.

**Q. How does Colliers arrive at their estimate of fair market value and rental payments?**

A. Colliers calculates the fair market value of the NPT ROW using the corridor value approach. This approach involves a two-step process which first calculates the across-the-fence (ATF) value and then applies an enhancement factor (EF). Colliers' original fair market rent is adjusted for subsequent market change in order to provide the updated market value used in the filing.

Colliers calculates the market rent of the NPT ROW by converting the market value of the ROW (based on corridor value approach) using a capitalization rate. Colliers states "the ultimate objective of this[corridor market value] appraisal is to arrive at an opinion of market rent for NPT's ground lease; therefore this approach involves developing two valuations" The first valuation arrives at corridor market value, the second valuation performs "additional analysis" of market valuation to arrive at "an opinion of market rent". (*PSNH Petition at 187*).

Colliers produced these opinions on two separate time frames - an original November 14, 2014 appraisal report and an updated September 18, 2015 Appraisal Report. *PSMH Petition at Bates 199-212 and 183-198 respectively*.

The four components mentioned above (at-the-fence value, enhancement factor, market change, and capitalization rate) as well as other variables,

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<sup>3</sup> JJB-8 "Establishing Fair Market Value for Rent" November 19, 2015. Principal Valuations

1 are summarized in in JJB-1 Colliers Valuation Formulas Components &  
2 Assumptions.”

3 **Q. What is the purpose of your testimony?**

4 A. The purpose of my testimony is to support my conclusion that PSNH's  
5 proposed lease payments, which are based solely on the market rent  
6 opinion of Colliers, inadequately compensate PSNH for the value conveyed.  
7 This conclusion is developed in Sections II, III and IV of my testimony. My  
8 analysis adopts a customer perspective in order to balance the non-arm's  
9 length relationship between the two Eversource affiliated entities - PSNH  
10 and NPT. My testimony recommends a minimum (floor) market rent for the  
11 700-parcel right of way referred to as the NPT ROW. My recommendation  
12 is based on revised valuations shown in Table 8 of Section V of my  
13 testimony. The purpose of my recommendation is to establish a minimally  
14 acceptable lease payment (floor) that would have been established in an  
15 arm's length lessor and lessee transaction.

16 **Q. Define the "customer perspective" you use in your analysis and**  
17 **recommendation.**

18 A. In determining whether the proposed lease payment represents fair and  
19 adequate compensation my analysis is guided by the following  
20 perspective:

- 21 1. The ROW land and land rights are owned by PSNH;
- 22 2. The NPT ROW is a one-of-a-kind scarce resource needed to build a  
23 transmission infrastructure that will produce significant gain and  
24 earnings for the lessee NPT; and
- 25 3. The costs associated with acquiring and developing the existing  
26 ROW, to be conveyed to NPT, have been paid by PSNH's ratepayers,  
27 not Eversource. In this lease transaction, the ROW is an income-  
28 generating asset.

29 **Q. What is your analytical approach in this docket?**



1 A. First, based on information in the filing and data received via discovery  
2 and technical sessions, I have reviewed the approaches of PSNH and  
3 Colliers that led to a \$795,203 annual lease payment recommendation. I  
4 also analyzed the mechanics of Colliers' corridor value approach model  
5 including valuation formulas, variables, and assumptions. I have already  
6 summarized the approaches of PSNH and Colliers earlier in this section of  
7 my testimony.

8 Next, I have identified three specific valuation assumptions, made by  
9 Colliers, that are of concern because they lead to unfair market valuation  
10 based my review and analysis. The three input assumptions are:

- 11 1. Across-the-fence value (as of 2017);
- 12 2. Capitalization Rate; and
- 13 3. Enhancement Factor.

14 My concerns regarding PSNH's approach and Colliers' assumptions are  
15 based on my research which included:

- 16 • OCA industry research from valuation experts; and
- 17 • OCA research of comparable market transactions not considered by  
18 PSNH or Colliers.<sup>4</sup>

19 Finally, I make adjustments to the three valuations assumptions listed  
20 above and calculate new valuations for corridor market value and market  
21 rent.

22 **Q. Explain the mechanics used to calculate new valuations for corridor**  
23 **market value and market rent.**

24 A. My valuations are calculated following the mechanics of the Colliers  
25 corridor valuation model and rent calculation framework presented in the  
26 filing. Therefore I am using the formulas shown in column B of Table 2  
27 Colliers Valuation Formulas (Ref JJB-1), and the assumptions variables

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<sup>4</sup> List if comparable market transactions is contained in JJB-2 "Comparable Market Transactions OCA research"

1 listed in column c of Table 3 Colliers Valuation Components (Ref JJB-1). I  
2 make modifications to the values of three of Colliers input assumption  
3 variables as I have discussed above. Using the modified assumptions I re-  
4 run calculations based on the Colliers framework producing a market  
5 valuation and a market rent calculation. The results are presented in  
6 Section V of my testimony and are shown in Table 8 Comparison of  
7 Valuations Colliers vs OCA.

8 **Q. What is your recommended floor for annual lease payment?**

9 A. The minimum annual rent that would be acceptable to customers is  
10 \$4,131,168. PSNH has proposed \$795,203 (rent stable option).<sup>5</sup>

11 **Q. How is the remaining portion of your testimony organized?**

12 The remaining portion of my testimony analyzes each of my three  
13 adjustments to the values assigned to assumption variables, and presents  
14 calculations the new valuations. In Section II I discuss Colliers ATF  
15 assumption and my proposed adjustment of 5 percent market change to  
16 ATF for the period of 2015-2017.

17 In Section III I analyze Colliers' Capitalization Rate assumption and my  
18 proposed adjustment of 8.6 percent based on review of capital structure  
19 debt equity ratios.

20 In Section IV I analyze Colliers Enhancement Factor assumption; best  
21 practices and recommendation from valuation experts regarding  
22 enhancement factor considerations; other valuation models used for  
23 valuing highly technical projects such as high voltage electric  
24 transmission; the limitations of the ATF/enhancement factor approach;  
25 and methodologies and valuations of three regional market transactions

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<sup>5</sup> According to Colliers' model, all rent options, stable for term and growth, have equivalent economic value and identical Internal Rate of Return ("IRR"). My testimony uses rent stable option for ease of comparison.

1 involving high voltage electric transmission ROWs in Vermont,  
2 Massachusetts and New York. Based on my research I adjust Colliers  
3 enhancement factor to 9.5x.

4 In Section V of my testimony I present OCA's revised valuation results  
5 based on my three adjustments. In Table 8, Comparison of Valuations  
6 Colliers vs OCA, the three adjustments are shown, side by side with  
7 Colliers, in the following rows:

- 8 1. row 4 "Market Change 2015-2017" of 5% (discussed in Section II);
- 9 2. row 6 "Capitalization Rate" of 8.6% (discussed in Section III); and
- 10 3. row 2 "Enhancement Factor" of 9.5x (discussed in Section IV)

11 Propose minimum lease payment of \$4,131,168 is shown in column d of  
12 the table.

13 Finally in Section VI I summarize my analysis and recommendation the  
14 Commission approval of the lease transaction subject to the condition of a  
15 minimum annual lease payment of \$4,131,168.

16  
17 **II. Colliers' ATF Assumption (Adjustment #1)**

18 **Q. Discuss your first adjustment, 5 percent Market Change to Colliers**  
19 **ATF, which is shown in row 4 of table 8.**

20 A. My market change adjustment is consistent with Colliers methodology to  
21 account for changes in New Hampshire's real estate market when updating  
22 an appraisal. Colliers made a 2.6 percent market adjustment to their  
23 original ATF appraisal when it created its updated report. My 5 percent  
24 market change assumption for 2015-2017 is based on recently updated  
25 real estate market data from PSNH. Ref JJB-22 OCA 2-01.

1 **Briefly explain “across-the-fence” (ATF) value, which is the first**  
2 **multiplier in the corridor market value formula shown in row 1 of**  
3 **Table 2 Colliers Valuation Formulas.**

4 A. Colliers states the ATF is “measured as the aggregate value of the zones  
5 estimated [700 properties] as across-the-fence (ATF) values based on local  
6 land sales.” PSNH Petition at Bates 250. As shown above in Table 3  
7 Valuation Components, Colliers has measured the NPT ROW ATF to be  
8 \$4,815,723. ATF looks at comparable sales along the corridor as a primary  
9 indicator of value. A similar perspective on ATF is held by the National  
10 Oceanic and Atmospheric Administration (“NOAA”) - “[t]he across-the-  
11 fence rule holds that a given parcel is worth about the same as similar  
12 neighboring land.”<sup>6</sup> In summary ATF is a static traditional sales  
13 comparison approach that establishes value of a corridor using historical  
14 buy-sell transactions.

15 **Q. In arriving at an ATF value of \$4,815,723 did Colliers look at local and**  
16 **regional developments in the electric transmission ROW lease**  
17 **transactions outside of the NPT ROW corridor?**

18 A. No. In its Summary of Appraisal Valuation Method Colliers states there are  
19 no “recent sales of assembled corridor strips of similar size and length in  
20 central and northern New Hampshire” and “[s]uch do not exist, therefore,  
21 we must consider sales and uses of land in the subject neighborhood and  
22 the subject city similar in zoning, location and use to the subject corridor,  
23 including sales of smaller strips of former railroad land.” PSNH Petition at  
24 Bates 216.

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<sup>6</sup> National Oceanic and Atmospheric Administration (NOAA). Fair Market Value Analysis for Fiber Optic Cable Permit in Marine Sanctuaries. August 2002. Available at: [https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/archive/library/pdfs/fmv\\_focpermit\\_final\\_2002.pdf](https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/archive/library/pdfs/fmv_focpermit_final_2002.pdf)

**III. Colliers Capitalization Rate (Adjustment #2)**

**Q. Briefly explain Capitalization Rate which is used in Colliers market rent formula shown in row 2 of Table 2 "Colliers Valuation Formulas."**

A. According to Colliers, capitalization rate is defined as "rate to the land". PSNH Petition at 253. According to Colliers witness Robert LaPorte, "a capitalization rate is the relationship between income and value." Ref JJB-18 OCA 2-007. The Colliers rent calculation formula multiplies the capitalization rate with corridor market value, (corridor market value is calculated in formula 1 row 1 of Table 2) to arrive at market rent (lease payments). Colliers assumes a 7 percent capitalization rate in its analysis. PSNH Petition at 0259. In arriving at the 7 percent capitalization rate (shown above in row E Table 3 Colliers Valuation Components Colliers Ref JJB-1) Colliers assumes a hypothetical debt-equity project capital structure that a hypothetical investor would use.

**Q. What is Colliers debt to equity ratio assumption?**

A. Colliers assumes a 75 percent debt and 25 percent equity ratio within its capitalization rate. PSNH Petition at Bates 259. According to Mr. LaPorte, this ratio is an average of many past projects Colliers has looked at. The actual debt equity ratio and capital structure of a project is ultimately determined by the actual project investor (as stated by Robert LaPorte at 9/7/2017 Technical Session).

**Q. What is the capital structure of Eversource Energy?**

A. Eversource Energy's capital structure is 45.5 percent debt and 53.5 percent equity. Reference JJB-10 Value Line.

**Q. What is the capital structure of the Northern Pass Project in NPT's Transmission Service Agreement (TSA) used for FERC formula rate making purposes?**

A. The NPT project assumes 50 percent debt 50 percent equity: "The overall rate of return for the Northern Pass Project will be based on a capital

1 structure made up of 50 percent debt and 50 percent equity." Reference  
2 the 9/5/2017 supplemental response to OCA 2-019. See JJB-20.

3 **Q. According to Colliers, what would be their capitalization rate**  
4 **assumption (row E Table 2 above) if it was based on a 50 percent debt**  
5 **and 50 percent equity structure?**

6 A. Colliers adjusted capitalization rate would be 8.6 percent, vs the current 7  
7 percent assumption. Ref JJB-21 TS-005.

8 **Q. What would be the impact on Colliers' market rent opinion using 8.6**  
9 **percent capitalization rate?**

10 A. Market rent would increase using the higher capitalization rate of 8.6  
11 percent.

12 **Q. What is your adjusted capitalization rate used in your valuation**  
13 **shown in Section V?**

14 A. My valuation is based on a 8.6 percent capitalization rate. As discussed  
15 above, Colliers' capitalization rate assumption of 7 percent includes a  
16 project capital structure assumption that is significantly more leveraged  
17 then Eversource (48 percent - 52 percent and more leverage than NPT  
18 LLCs TSA (50 percent -50 percent). My 8.6 percent capitalization rate is  
19 based on a 50 percent -50 percent capital structure assumption.

20  
21 **IV. Colliers Enhancement Factor Assumption (Adjustment #3)**

22 **Q. Briefly explain "enhancement factor" which is the second multiplier in**  
23 **the corridor market value formula shown in row 1 of Table 2 Colliers**  
24 **Valuation Formulas.**

25 A. The enhancement factor represents the assemblage value of a contiguous  
26 uninterrupted right of way from a start point to an end point, According to  
27 Mr. LaPorte, "[a]n enhancement factor can be applied [to the ATF] to  
28 reflect the 'assemblage' value created by the fact that the right of way is an  
29 intact collection of numerous parcels that from the corridor." PSNH

Petition Bates page 173. For the NPT ROW, Colliers enhancement factor assumption is 2.3x.

**Q. What is your adjustment to Colliers enhancement factor?**

A. My valuation uses an enhancement factor of 9.5x as compared to Colliers assumption of 2.3x. The adjustment reflects several types of issues discussed in this section including:

- There are factors not considered in Colliers' enhancement factor that, based on industry research, should be part of the evaluation;
- Colliers has skipped some of the steps it lists for determining enhancement factor;
- There are inherent limitations of the ATF/enhancement value approach for valuing ROWs used for high voltage electric transmission projects such as NPT.

**Q. How did Colliers arrive at a 2.3x enhancement/assembly factor?**

A. Colliers' 2.3x enhancement factor is based on historical sales of corridors. "Sales of corridors indicate that a sale price of a corridor exceeds the sum of the at-the-fence land values". Ref LaPorte testimony at Bates 0174. Colliers also conducted interviews and described other potential process steps that should be taken in arriving at an enhancement factor.

**Q. What are the key shortcomings of Colliers' assessment of the project's enhancement factor?**

A. Colliers failed to consider: 1) relevant comparable transactions in the region; 2) the original costs of assembling and clearing the PSNH ROW; 3) the replacement cost of acquiring an alternate corridor; and 4) the foreseeable financial gain of the lessee. Each of these is described in greater detail below

1 **Q. Regarding regional market transactions (sales or rental) for ROWs**  
2 **used for high voltage electric transmission projects, does Colliers**  
3 **enhancement factor consider such transactions in its ATF or**  
4 **enhancement factor values?**

5 A. No. The corridor sales transactions included in Colliers valuation analysis  
6 are listed starting at Bates page 0246 of the petition. None of these  
7 transactions are for a high voltage electric transmission ROW projects  
8 similar to NPT ROW. Statement by Robert LaPorte 9/7/2017<sup>2</sup> tech session.

9 **Q. Based on experts, do market transactions, even if the transaction is**  
10 **not an exact precedent to the project (i.e. NPT ROW), serve as a price**  
11 **guide in the evaluation process?**

12 A. Yes, according to NOAA discussion of right of way valuations and market transaction  
13 analysis “[p]ast transactions are rarely an exact precedent, but they serve as a guide  
14 to price levels and overall market trends, and they incorporate elements of the other  
15 valuation methods.”<sup>7</sup>

16 **Q. Does your adjustment to Colliers’ enhancement factor take into**  
17 **consideration these other regional high voltage electric transmission**  
18 **transactions?**

19 A. Yes. The OCA identified three separate transactions for high voltage  
20 transmission system Rights-Of-Way (“ROW”) that could serve as reference  
21 points when considering the market value of the proposed lease between  
22 PSNH and NPT. The projects are

- 23 • TDI New England (“TDI”) / Vermont Agency of Transportation  
24 (“VTRANS”)<sup>8</sup>;
- 25 • Neptune Regional Transmission System, LLC / NYS Office of Parks  
26 and Recreation and Historic Preservation (“NYSOPRHP”)<sup>9</sup>;

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<sup>7</sup> JJB-3 “Final Report Fair Market Value Analysis for a Fiber Optic Cable Permit in National Marine Sanctuaries”, August 2002. National Oceanic and Atmospheric Administration (NOAA)

<sup>8</sup> TDI-VTRANS Lease Option Agreement July 17, 2015 available at <http://www.necplink.com/docs/regulatory/agreements/2015-07-17%20TDI-NE%20and%20VTrans%20Lease%20Option%20Agreement%20wAttachments.pdf>

<sup>9</sup> Neptune RTS-NYSOPRH Easement Agreement. June 23, 2015. Available at <https://drive.google.com/file/d/0B3EainYDIqr1cG96azJfbWUyVzQ/view>



- Eversource Energy/ Massachusetts Bay Transit Authority ("MBTA")<sup>10</sup>.

A description of the three transactions is included in JJB-2 Comparable Market Transactions OCA Research.

**Q. Regarding costs of PSNH (recovered from customers) to build the existing ROW proposed for the NPT project and cost to acquire and alternate corridor, should these be included in a ROW valuation?**

A. Yes. In an appeal won by CSX (ref JJB-7), inclusion of past cost to build a corridor were argued to be a valid consideration in setting the enhancement factor.

**Q. Does Colliers 2.3x enhancement factor and valuation process take into account these costs (value) of an existing corridor?**

A. No, Colliers' 2.3x enhancement and corridor value approach values a corridor of raw forest land the same as a corridor of properties in an existing ROW and ready to support construction of transmission lines. The company responded "the enhancement factor is neutral with respect to [existing] site improvements". Ref JJB-17 OCA 2-5 c.

**Q. Did the TDI/VTRANS high voltage transmission ROW transaction consider the impact that the cost of an alternate corridor would have?**

A. Yes. In discussion with VTRANS officials, they indicated that VTRANS cost estimate to build an alternate linear ROW was a significant factor in arriving at fair market rent payment. The table below TDI / VTRANS-TDI Right-of-Way Lease Payments shows the initial annual lease payment proposed by TDI was \$525,000 but the parties eventually settled on an annual lease payment amount of \$4,000,000. A portion of the increased valuation represents the value of an existing corridor.

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<sup>10</sup> Eversource Energy Option Agreement - MBTA May 30, 2017. Available at <https://drive.google.com/file/d/0B90L-xrTFLWfVTJaR0lqNHNsSG8/view>

Table : -TDI / VTRANS Right of Way Lease Payments		
col a	col b	col c
	12/8/2014 Spinner Testimony (TDI)	Final Settlement
Lease Payment (annual)	\$ 525,000	\$ 4,000,000
Lease Payment (40 years)	\$ 21,900,000	\$ 160,000,000

1  
2 **Q. Does your adjustment to Colliers' enhancement factor take into**  
3 **consideration the value of PSNH's existing corridor?**

4 A. Yes. Based on the recommendation of Mr. LaPorte cited above, and based  
5 on analysis of the TDI/VTRANS transaction cited earlier, my adjustment to  
6 Colliers enhancement factor includes consideration of cost of alternate  
7 corridor.

8 **Q. Regarding financial gain to the lessee, based on valuation experts**  
9 **other than Colliers, is this a consideration in valuing the NPT ROW**  
10 **lease payment?**

11 A. Yes. According to NOAA, " the gain to the buyer has received greater  
12 emphasis in price negotiations. The substantial revenues generated by the  
13 fiber optic industry have recently resulted in rapidly increasing prices for  
14 fiber-optic rights of way."<sup>11</sup> Note that fundamental valuations concepts for  
15 a fiber optic ROW also apply to a high voltage electric transmission ROW.  
16 Expert valuation methodologies, designed to supplement traditional  
17 valuation methods or replace them, consider the economics of the project  
18 and gain to lessee. One such approach is the Enterprise Income Approach  
19 developed by The Center for Applied Research, Inc. <sup>12</sup> who performs land  
20 valuation research for ROWs used for fiber optic projects on behalf of the  
21 U.S. Department of Commerce and, National Oceanic and Atmospheric

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11 JJB-3 "Final Report Fair Market Value Analysis for a Fiber Optic Cable Permit in National Marine Sanctuaries", August 2002. National Oceanic and Atmospheric Administration (NOAA)

12 Center for Applied Research clients include <http://www.centerforappliedresearch.com/clients.htm>

Administration (NOAA).<sup>13</sup> The Enterprise Income valuation methodology “apportions to a landowner, i.e. the land, a share of the profits, or net income, earned by an enterprise... whose operations require rights-of-way, such as for a pipeline, an electric transmission line or a fiber optic cable.”<sup>14</sup> According to Center for Applied Research economists Robert Robertson, in an advising letter to NOAA, “values for prospective permits should be based as closely as possible on the profitability expectations of the applicants.”<sup>15</sup>

Similarly, the Enterprise Income Approach was used by KMI Corporation to determine fair market valuations of ROW for NOAA<sup>16</sup>.

**Q. Does Colliers’ 2.3 x enhancement/assemblage factors take into account the economics of the transmission project or gain to NPT LLC the lessee?**

A. No, Colliers’ enhancement factor is limited to measuring the assemblage value only. In discovery PSNH was asked: “Are these corridor valuations [\$11,360,163] in any way influenced, directly or indirectly, by the economics of the NPT project including, but not limited to, its revenues, expenses, capacity, and/or cash flow from operations?” The company responded “No.” Ref JJB-19 OCA 2-16. And, similarly: “The enhancement factor predominately reflects the benefit of having a very long already assembled corridor as evidenced by other sales of corridors” Ref JJB 17 OCA 2-005 c.

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<sup>13</sup> For a listing of Center for Applied Research clients, see <http://www.centerforappliedresearch.com/clients.htm>

<sup>14</sup> See JJB-4 "Establishing the Value of Permits for Fiber Optic Installations in National Marine Sanctuaries" May 28,2000 by The Center for Applied Research, Inc.

<sup>15</sup> See JJB-6 Advisory letter to NOAA. Robert Robinson, Senior Economist

<sup>16</sup> Ref JJB-5 "Methodology of Revenue-Based Rights-Of-Way Fee Estimates in Marine Sanctuaries" September 2000. KMI Corporation

1 **Q. Does your adjustment to Colliers enhancement factor take into**  
2 **consideration the gain to the lessee – Northern Pass Transmission**  
3 **LLC?**

4 A. Yes. Notwithstanding the absence of economic information of the NPT  
5 project, it is my assumption that the proposed annual lease payment of  
6 \$795,203 is inadequate given the economic gain to the lessee, NPT.

7 **Q. Regarding expert opinion on the effectiveness of the**  
8 **ATF/enhancement factor approach used by Colliers, is this an**  
9 **effective approach for valuing the NPT ROW?**

10 A. Based on my research the ATF/Corridor Value Approach has limited value  
11 for highly technical business uses such as electric transmission and  
12 communications projects. The owners of such corridors typically use one  
13 of two valuation strategies:

14 1) Choose an approach other than the traditional ATF/Corridor  
15 Approach; or

16 2) Use the ATF/ Corridor approach but with more significant  
17 adjustments to the ATF through using a higher enhancement factor  
18 relative to Colliers' assumption of 2.3x.

19 Examples of valuation strategies that avoid or supplement the ATF /  
20 enhancement factor are noted in the following research:

- 21 • NOAA, charged with valuing ROW for fiber optic projects for federal  
22 government, does not use the ATF/Corridor approach. "The across-  
23 the-fence rule holds that a given parcel is worth about the same as  
24 similar neighboring land". Ref NOAA 2002 Report;<sup>17</sup>
- 25 • VTRANS, owner of ROW for the proposed for New England Clean  
26 Power Link NECPL, dropped consideration of ATF/Corridor  
27 approach early on because of the complexity of the project;<sup>18</sup>

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<sup>17</sup> See JJB-3 National Oceanic and Atmospheric Administration (NOAA). "Final Report Fair Market Value Analysis for a Fiber Optic Cable Permit in National Marine Sanctuaries, August 2002

<sup>18</sup> Based on discussion with VTRANS officials regarding the their \$4,000,000 annual lease payment valuation

- 1 • Kingston Cole & Associate's valuation appraisal and  
2 recommendation regarding fair market valuation of ROW owned by  
3 VTRANS was not based on ATF/enhancement corridor approach;<sup>19</sup>
- 4 • A CSX appraiser testified under oath that the assemblage factor can  
5 be 4x-10x ATF value, and that a study on corridor construction by  
6 the California Department of Transportation showed a ATF of 9.6 for  
7 one corridor;"<sup>20</sup> and
- 8 • Enhancement factor multiples can rise well above 10x . "In recent  
9 transaction involving fiber optic corridors the prices paid exceed the  
10 ATF land values by much higher multiples" (referring to a typical  
11 assemblage multiple of 2x – 6x) Ref NOAA 2002 Report;<sup>21</sup>

12 **Q. What is the relevance of the research findings (showing ROW owners**  
13 **either avoid using ATF/enhancement factor approach, or use the**  
14 **approach with higher enhancement factors) in determining your**  
15 **adjustment to Colliers 2.3 enhancement factor?**

16 A. My approach is to adjust Colliers 2.3x enhancement factor as a means of  
17 reconciling Colliers' traditional corridor value approach, with current  
18 industry practices. Based on my analysis of available information on high  
19 voltage electric corridor transactions (see JJB-2) , Colliers' valuation using  
20 ATF and an enhancement factor of 2.3x, appears significantly lower than  
21 valuation of similar regional transactions.

22 **Q. What evidence supports your conclusion Colliers valuation is**  
23 **significantly lower than comparable transactions?**

24 A. I have considered two data points, annual payment information and the  
25 ROW length, contained in Comparable Market Transaction OCA Research,  
26 cited earlier. Ref JJB-2. While data is limited, and the transaction not an  
27 exact precedent to the NPT project, it appears that the annual payment per

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<sup>19</sup> See JJB-9 "Report to Vermont Agency of Transportation Right-Of-Way Section - Appraisal and Recommendation Regarding Fair Market Value Rates" September 7, 2015. Kingston Cole & Associates

<sup>20</sup> JJB-7 CSX Appeal transcript

<sup>21</sup> See JJB-3 National Oceanic and Atmospheric Administration (NOAA). "Final Report Fair Market Value Analysis for a Fiber Optic Cable Permit in National Marine Sanctuaries, August 2002

1 mile of the three market transaction, on average, is over 10 times greater  
2 than the proposed lease payment for NPT ROW. And, looking just at the  
3 TDI/VTRANS transaction in isolation, the multiple is considerably higher.  
4 Based on this rough comparison, the NPT ROW appears to be undervalued

5 **Q. What is the relevance of the non-arm's length relationship between**  
6 **PSNH and NPT LLC discussed earlier in your testimony??**

7 A. My approach is to adjust Colliers 2.3x enhancement factor as a means of  
8 reconciling Colliers traditional corridor value approach, with a market  
9 value that would occur in an arm's length competitive valuation process.

10 **Q. Please summarize the consideration discussed in the section**  
11 **supporting an adjusted enhancement factor of 9.5x.**

12 A. My conclusions are:

- 13 • A competitive and open market for the property, which is assumed  
14 in a fair market valuation, did not exist;
- 15 • No consideration is given to factors such as gain to NPT, project  
16 economics, supply and demand, value of an existing ROW already  
17 cleared and ready to construction;
- 18 • The valuation did not include review of the cost to acquire an  
19 alternate corridor;
- 20 • No actual high voltage electric corridor sales were used in the  
21 valuation;
- 22 • The analysis does not review lease valuations on ROWs in recent  
23 comparable electric transmission ROW leases in the region;

24  
25 As a result PSNH's proposed corridor lease payments do not adequately  
26 compensate the customer.

27  
28 **Section V OCA Adjusted Market and Rent Valuation**

29 **Q. What are your valuation results?**

1 A. My valuations are \$4,131,168 market rent based on \$48,036,837 NPT ROW  
2 corridor market value, based on three adjustments made to Colliers model  
3 including market change, capitalization rate and enhancement factor.

4 **Q. Please show a side by side comparison of your valuation and key**  
5 **assumption variables.**

6 A. Table 8, shown on the next page, contains a side by side comparison of  
7 OCA and Colliers valuations.

**DE 15-464 PSNH Lease to NPT LLC**  
**Testimony of James Brennan**  
**September 14, 2017**

<b>Table 8: Comparison of Valuations ( Colliers vs OCA)</b>			
col a	col b	col c	col d
row	<u>Component Name</u>	<u>Colliers Valuation</u>	<u>OCA Valuation</u>
1	ATF Value	\$ 4,815,723	\$ 4,815,723
2	Enhancement Factor	2.3	9.50
3	Market change 2014-2015	2.4%	2.4%
4	Market change 2015-2017	na	5.0%
5	Corridore Market Value	\$ 11,360,038	\$ 48,036,837
6	Capitalization rate	0.07	8.6%
7	Reversoin Value	\$ 13,868,269	\$ 58,643,094
8	IRR	7.1076%	8.6713%
9	Year 40 NPV using IRR	\$ 11,360,038.00	\$ 48,036,837
10	Rent per mile		\$ 41,312
11	<u>year #</u>	<u>Rent Stable for Term</u>	<u>Rent Stable for Term</u>
12	1	\$ 795,203	\$ 4,131,168
13	2	\$ 795,203	\$ 4,131,168
14	3	\$ 795,203	\$ 4,131,168
15	4	\$ 795,203	\$ 4,131,168
16	5	\$ 795,203	\$ 4,131,168
17	6	\$ 795,203	\$ 4,131,168
18	7	\$ 795,203	\$ 4,131,168
19	8	\$ 795,203	\$ 4,131,168
20	9	\$ 795,203	\$ 4,131,168
21	10	\$ 795,203	\$ 4,131,168
22	11	\$ 795,203	\$ 4,131,168
23	12	\$ 795,203	\$ 4,131,168
24	13	\$ 795,203	\$ 4,131,168
25	14	\$ 795,203	\$ 4,131,168
26	15	\$ 795,203	\$ 4,131,168
27	16	\$ 795,203	\$ 4,131,168
28	17	\$ 795,203	\$ 4,131,168
29	18	\$ 795,203	\$ 4,131,168
30	19	\$ 795,203	\$ 4,131,168
31	20	\$ 795,203	\$ 4,131,168
32	21	\$ 795,203	\$ 4,131,168
33	22	\$ 795,203	\$ 4,131,168
34	23	\$ 795,203	\$ 4,131,168
35	24	\$ 795,203	\$ 4,131,168
36	25	\$ 795,203	\$ 4,131,168
37	26	\$ 795,203	\$ 4,131,168
38	27	\$ 795,203	\$ 4,131,168
39	28	\$ 795,203	\$ 4,131,168
40	29	\$ 795,203	\$ 4,131,168
41	30	\$ 795,203	\$ 4,131,168
42	31	\$ 795,203	\$ 4,131,168
43	32	\$ 795,203	\$ 4,131,168
44	33	\$ 795,203	\$ 4,131,168
45	34	\$ 795,203	\$ 4,131,168
46	35	\$ 795,203	\$ 4,131,168
47	36	\$ 795,203	\$ 4,131,168
48	37	\$ 795,203	\$ 4,131,168
49	38	\$ 795,203	\$ 4,131,168
50	39	\$ 795,203	\$ 4,131,168
51	40	\$ 14,663,472	\$ 62,774,262
52	40 year rent	\$ 31,808,106	\$ 165,246,719
53	NPV at IRR	\$ 11,360,038	\$ 48,036,837



1 **Q. Summarize your first adjustment, 5% Market Change, shown in row 4**  
2 **of table 8.**

3 A. My market change adjustment is consistent with Colliers methodology to  
4 account for change in NH's real estate market when updating an appraisal.  
5 Colliers made a 2.6% market adjustment to their original appraisal when it  
6 created its updated report. My 5% market change assumption for 2015-  
7 2017 is based on data from PSNH. Ref JJB-22 OCA 2-01.

8 **Q. Summarize your second adjustment, 8.6 percent Capitalization Rate,**  
9 **shown in row 6 of table 8.**

10 A. As discussed in Section III of my testimony, Colliers capitalization rate  
11 assumption of 7 percent includes an assumption of a project capital  
12 structure that is significantly more leverage than Eversource (48%-52%)  
13 and more leverage than NPT LLCs TSA (50%-50%). My 8.6% capitalization  
14 rate is based on a 50%-50% capital structure assumption.

15 **Q. Summarize your third adjustment, 9.5x Enhancement Factor, shown in**  
16 **row 2 of table 8.**

17 A. The increase to a 9.5x enhancement factor reconciles Colliers market rent,  
18 as calculated using Colliers approach, to a rent level based on  
19 considerations of relevant comparable market transactions in the region,  
20 the original cost of assembling and clearing the PSNH ROW, the cost of  
21 acquiring an alternate corridor, and the foreseeable gain to the lessee, NPT  
22 LLC.

23  
24 **Section VI Summary and Recommendation**

25 **Q. Please summarize your recommendation.**

26 A. Colliers AFT/Corridor value approach, when compared to industry expert  
27 best practices and when compared to approaches used in other high  
28 voltage electric transmission corridor valuations, has significant  
29 shortcomings. This approach has resulted in a market rent that falls below

1 fair market value. PSNH has not supplemented or altered the approach so  
2 as to incorporate the effect of competition and open marketing that is  
3 assumed in fair market valuations.

4 To protect customers, I have calculated a new market rent, shown in Table  
5 8, by adjusting Colliers model in order to offset an ineffective valuation  
6 approach. The primary driver for the increase in valuation shown in table  
7 8 is a 9.5x enhancement factor. The increase to a 9.5x enhancement factor  
8 is used in order to reconcile the market rent as calculated using Colliers  
9 approach, to a rent level that would have occurred in a competitive arm's  
10 length negotiating process.

11 While I can't produce a calculation that arrives at 9.5 on a factor by factor  
12 or variable by variable basis, because it is essentially a judgement of many  
13 considerations discussed in my testimony, below I am listing important  
14 problems and issues I feel the adjusted enhancement factor resolves to the  
15 satisfaction of customers:

- 16 • Non arm's length relationship between PSNH and NPT LLC;
- 17 • Closed off-market non-competitive approach to purchase and sales;
- 18 • Shortcomings of ATF/Corridor valuation for high voltage transmission  
19 projects;
- 20 • No consideration of economics of project or gains to the lessee;
- 21 • No consideration for value of existing ROW or cost to acquire alternate;
- 22 • No review of actual sales/market transactions of high voltage transmission  
23 ROWs
- 24 • No review of comparable market transaction in the region;
- 25 • High leverage capital structure incorporated in the capitalization rate;

26 My recommendation is to set a minimum acceptable lease payment amount  
27 of \$4,131,168.

28 **Q. Does this conclude your testimony?**

29 **A.** Yes.

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