

# PROPERTY TAX IMPLICATIONS NON-MARKET VALUATION OF ELECTRICITY INDUSTRY PROPERTIES



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## INTRODUCTION

- Kincardine hosts the Bruce Nuclear Generating plants, which represent some of the most significant electricity generating infrastructure in Canada.
- The nuclear plants and broader industry have a profound impact on the community, local economy and the municipality
- The plants are a significant factor within the local property tax base, however historic trends reveal a pattern of relative decline in the property tax contributions
- MTE was engaged to examine these historic patterns and trends and to consider the driving factors behind these trends.
  - Mainly, the implications of prescribed, non-market valuation models that apply to these properties as well as a broad range of other properties related to the generation, transformation and distribution of electricity.



**CONTEXT: 2024 LEVY SUMMARY**

- The amounts raised by Kincardine and Bruce County are determined by the property assessments returned by the Municipal Property Assessment Corporation (MPAC) and each year's tax rates,
  - Municipal rates are set sensitive to annual revenue requirements and the sum of all ratable assessment.
- These 5 sites represented approximately 2.1% and 12.4% of the County and Kincardine's 2024 own-purpose levies, respectively.
- Amounts raised by education rates are retained locally as part of the special treatment of these properties.

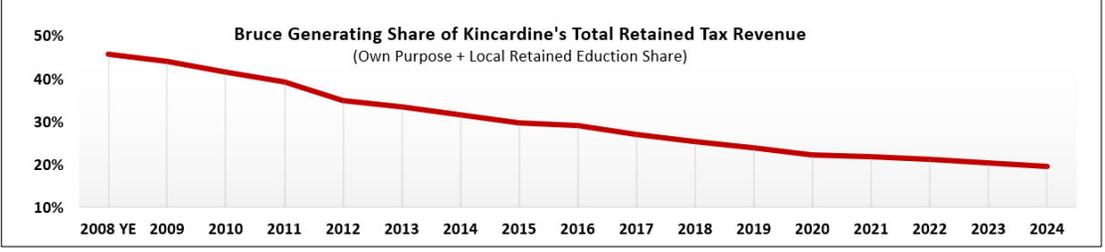
By Site	CVA	County	Kincardine	Education (Retained)	Total Municipally Levied	Non-Municipal Payments
Bruce A	37,481,500	\$283,896	\$496,725	\$421,954	\$1,202,575	\$1,963,036
Bruce B	76,220,000	\$513,937	\$899,222	\$791,727	\$2,204,886	\$5,968,019
Bruce Common	36,447,000	\$299,344	\$523,755	\$434,678	\$1,257,777	
Ancilliary 1	46,016,000	\$286,230	\$500,809	\$452,818	\$1,239,857	
Ancilliary 2	820,000	\$7,184	\$12,570	\$10,250	\$30,004	
Ancilliary 3	913,000	\$7,999	\$13,996	\$11,413	\$33,408	
<b>Total</b>	<b>197,897,500</b>	<b>\$1,398,590</b>	<b>\$2,447,077</b>	<b>\$2,122,840</b>	<b>\$5,968,507</b>	<b>\$7,931,055</b>

- The property rolls identified as Bruce A and B area also subject to special, property tax related payments, which are made to the Financial Corporation, which carries the *Stranded Debt* of Ontario Hydro.



**BROAD TREND OF RELATIVE DECLINE**

- MTE's study details assessment and tax change patterns beginning with Year-End 2008.
- The proportional share of Kincardine's assessment base revenue attributable to the generating stations and support facilities decreased by more than 55% over this observation period.



- While not the sole factor, this pattern of decline is largely attributable to the prescribed, non-market valuation models that apply to major components of these properties
  - Similar assessment policies apply to a broader range of properties related to the generation, transformation and distribution of electricity, however, the implications vary based the scale of the property.



## PRESCRIBED ASSESSMENT TREATMENT

### Special Valuation and Classification Treatment of Certain Properties Associated with the Generating, Transforming, and Distribution of Electricity



### MARKET VS. PRESCRIBED VALUE CVA'S

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- A municipality's annual levy is distributed among all ratable property based on the share of the total base each property's value represents.  
*(ultimately, we are taxing a property's value share, not absolute value)*
- For most property, CVA represents the Municipal Property Assessment Corporation's (MPAC) estimate of market value as at a certain point in time.
- CVAs are updated periodically to ensure that they reflect of the current market conditions.
- Many key properties associated with the electricity industry are treated outside these broad systemic norms.
  - For some property this precludes their values from changing in response to market dynamics
  - For others, the persistence of near static values are not mandated, but none-the-less evident.

## ASSESSMENT OF ELECTRICITY INDUSTRY PROPERTY

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The special rules applicable to the majority of electricity industry properties may be generally summarized as follows:

- All generating equipment and machinery are fully exempt, which is generally consistent with the broader assessment system.
  - E.g. Automotive assembly equipment is not assessed, but the factories that house it are;
- Buildings that house generating, transforming and auxiliary equipment are subject to unit value assessment determined on the \$86.11 per square metre (\$8/sq.ft.);
- Land and buildings used for administrative, commercial or related purposes are to be assessed and classified in the same manner as taxable property; and
- Certain land used for the transmission of electricity is subject to per-acre taxation rates prescribed by Provincial regulation.

## ASSESSMENT OF NUCLEAR GENERATING STATIONS

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- There are also provisions regulated under the Assessment Act that apply specifically to the Pickering, Darlington and Bruce nuclear generating facilities.
- This regulation prescribes a series of very specific assessment details and parameters.
  - Identification of property portions to be included in the commercial property class;
  - Identification of the specific property elements to be assessed using the square-metre based unit value assessment;
  - That where applicable, the area of a building is to be calculated at 95% of its exterior footprint; and
  - A prescribed methodology for determining the CVA of water intake/discharge facilities, including a scheme that is intended to apply a measure of indexing over time.

***It is important to note that these special rules for nuclear generation are site and building specific. As such, the regulation does not contemplate the treatment of any future generating stations.***

## BRUCE GENERATING ASSESSMENT PROGRESSION

- At the outset we fully expected that the property elements subject to a flat and fixed \$86.11 per square metre would show little or no change over the observation period

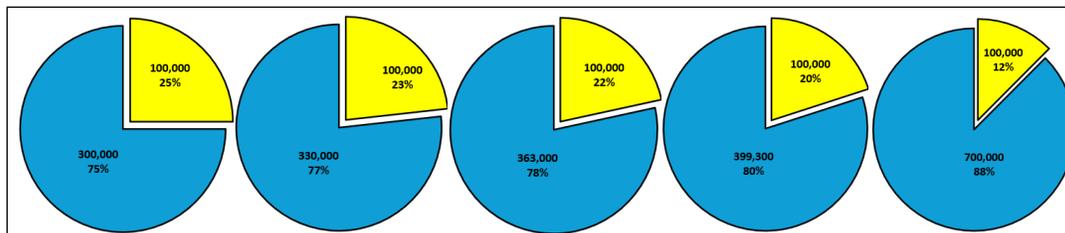
Assessment Roll	Bruce Generating Rolls (CVA in Millions)				Total	Non-Hydro Properties
	Generating (86.11/sq.m)	Water Intake Methodology	Common (Partial sq.m)	Market Value Elements		
2008 Year-End	17.1	43.9	26.8	79.7	167.4	1,148.6
2024 Roll Return	16.0	44.0	28.0	109.9	197.9	2,504.0
<b>Total Variation</b>	<b>-1.1</b>	<b>0.2</b>	<b>1.3</b>	<b>30.2</b>	<b>30.5</b>	<b>1,355.3</b>
<b>Variation %</b>	<b>-6.4%</b>	<b>0.3%</b>	<b>4.7%</b>	<b>37.8%</b>	<b>18.2%</b>	<b>118.0%</b>

### What we did not anticipate was:

- A decrease in the unit value based CVA;
- The absence of change in the water intake/discharge elements, to which a measure of inflationary indexing is to be applied; or
- The lack of change in assessment that is theoretically valued in the same manner as non-hydro/taxable property.

## CORE ISSUE: NON-MARKET VALUES IN A MARKET VALUE SYSTEM

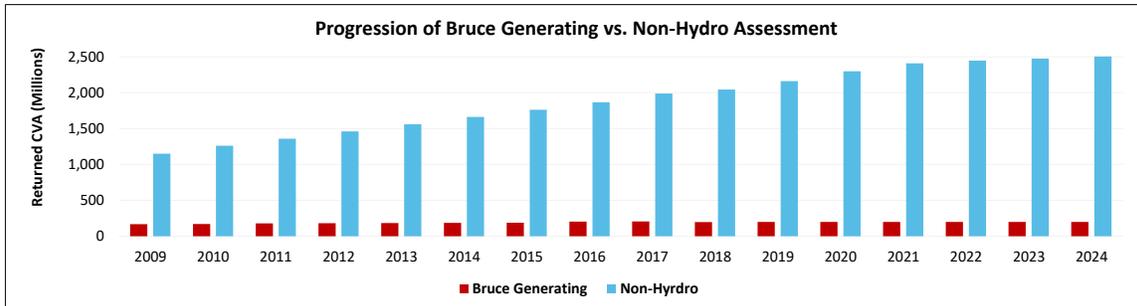
- Setting aside the actual methodologies and resulting values, the very nature of the prescribed rules pose a significant problem and virtually guarantee negative outcomes.
- When Non-Market Valuations are introduced into a Market Value tax system, there is an immediate disconnect



- While the non-market values do not necessarily decrease, they fall into relative decline
- As market based CVA's increase, driving tax rates down, the proportional share of revenue derived from each dollar of fixed assessment shrinks.

### BRUCE GENERATING ASSESSMENT PROGRESSION

- The negative implications attributable to using fixed values within a broader market value system is that they do not and cannot keep pace with the remainder of the assessment base.
- While Kincardine’s assessment base has undergone numerous updates to keep CVAs in reasonable alignment with market dynamics, the assessments for Bruce Generating and other hydro related properties have remained virtually unchanged over time



- The net outcome has been a relative decline in the assessment shares Bruce Generating properties have represented over time.

## OBSERVED TAX SHIFTS AND TAX CHANGE PATTERNS



### TAX CHANGE DRIVERS: VALUATION VS. GROWTH VS. LEVY CHANGE

- While the assessment figures alone reveal a clear pattern of relative decline, making a solid causal connection to tax outcomes is a more complex task.
- In order to make sure we were making accurate connections and conclusions; it was necessary to consider all the factors that influence the balance of taxation.

**Market Driven (Reassessment) Shifts:** Resulting in large part from the near-static valuation treatment of the subject properties within a property tax system based primarily on market values and market value updates

**Growth Driven Decline:** Growth in other property demographics has played a role. As other segments of the base have grown through building and development, Bruce Generating and other hydro related properties have become a smaller portion of the overall tax base.

**Municipal Levy Change** which has contributed significantly to the increase of the overall municipal levy, but has no implications for tax shifts, or tax shares due to the fact that levy increases are shared equally amongst all properties.

### OBSERVED TAX CHANGE BY FACTOR

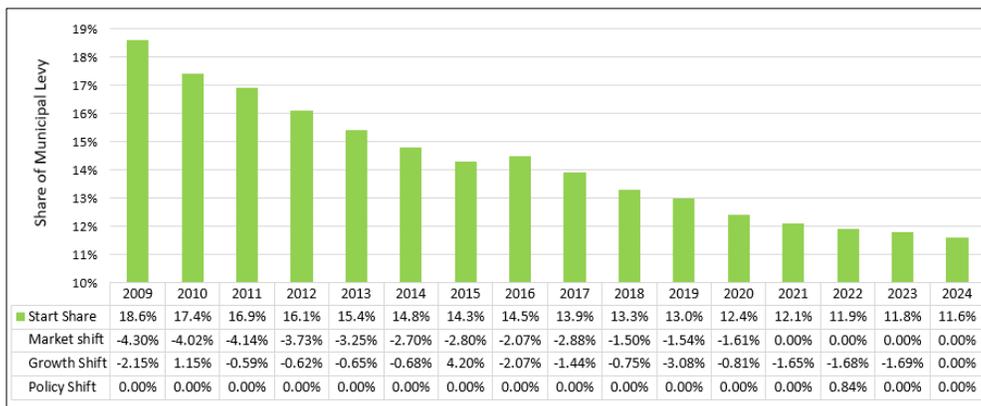
- By examining growth and reassessment changes separately we have been able to isolate the differential impacts each factor has had on the share of tax carried by the Bruce Generating sites and other electricity industry properties.
- This table provides a summary view of how each factor has influenced Kincardine’s local municipal levy.

Observation Group	2008 Year End		Cumulative Observed Change			2024 Start Levy	
	\$	Share	Market Shifts	Municipal Levy Change	Growth	\$	Share
Taxable	\$4,350,269	80.19%	\$416,167	\$10,969,017	\$2,671,990	\$18,407,442	87.59%
Bruce Generating	\$1,010,536	18.63%	-\$416,533	\$1,725,029	\$128,044	\$2,447,076	11.64%
Other Hydro	\$64,283	1.18%	\$412	\$109,082	-\$12,426	\$161,351	0.77%
<b>Total Hydro</b>	<b>\$1,074,819</b>	<b>19.81%</b>	<b>-\$416,121</b>	<b>\$1,834,111</b>	<b>\$115,618</b>	<b>\$2,608,427</b>	<b>12.41%</b>
<b>Grand Total</b>	<b>\$5,425,088</b>	<b>100.00%</b>	<b>\$46</b>	<b>\$12,803,128</b>	<b>\$2,787,608</b>	<b>\$21,015,869</b>	<b>100.00%</b>

- The Market Shifts have materialized as a result of the subject properties remaining virtually unchanged in the face of ongoing market value updates being applied to all other property types.

## BRUCE GENERATING TAX SHARES AND INFLUENCING FACTORS

- Proportional tax shares are primarily influenced by growth, reassessment and certain adjustments in municipal tax policy such as the County's change to the treatment of vacant/excess land in 2022.



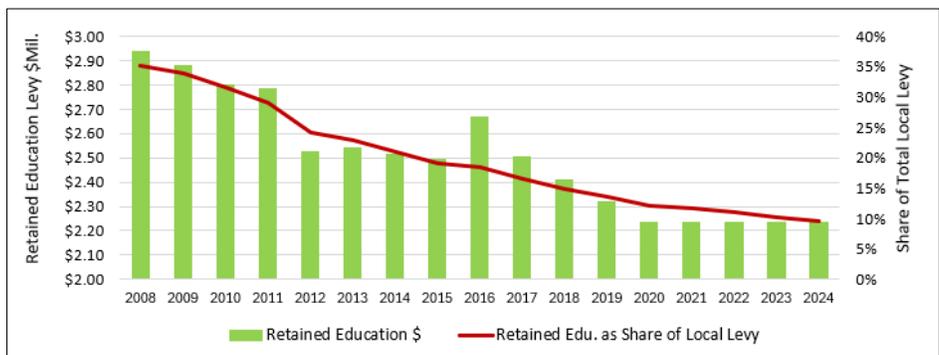
- It is the Market Shifts that are attributable in large part to the special and actual assessment treatment applied to the Bruce Generating Properties over time.

## RETAINED EDUCATION REVENUE

- Since 1998, amounts raised by way of the commercial and industrial education rates for certain hydro industry properties have been deemed to be local municipal revenue.
- As with their municipal counterparts, education tax rates have traditionally been adjusted in response to market value change for each reassessment and reassessment phase-in year.
  - Unlike municipal rates, there have been no upward adjustments in response to inflation, education rates have been in constant decline over time.
- The application of decreasing rates to static valuations has resulted in the absolute and ongoing reductions to this critical portion of the municipality's entitlement in relation to the subject properties.
  - As of year-end 2008, Kincardine's Local Revenue raised from Bruce Generating and other Hydro Properties exceeded \$2.9 Million, which represented over 35% of their total levy
  - As of roll return 2024, this amount has decreased by over 24% to \$2.23 Million
  - More dramatic is the fact that this revenue source represents only 9.6% of the municipality's total local levy, a proportional decrease of over 72%

### RETAINED EDUCATION REVENUE

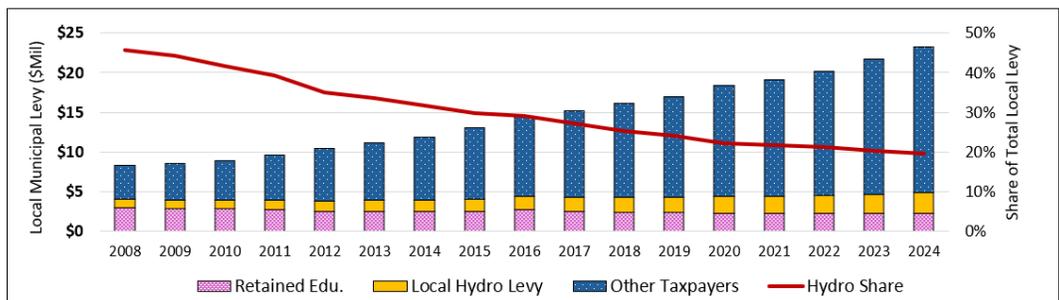
- This graph plots the progression of Kincardine’s annual retained education entitlement from Bruce Generating and other properties prescribed under the Electricity Act.



- This pattern of decline will have had a compound impact on Kincardine’s taxpayers as each dollar of lost revenue will have been made up by larger annual increases to the local levy.

### SUMMARY OF OBSERVED DECLINE

- This summary graph plots the overall progression of the following from 2008 year-end through 2024:
  - Each Year’s taxable levy as originally imposed;
  - Assessment based payments from all properties for which payments are made under the Electricity Act (Hydro Properties) including amount raised by way of the local general tax rates and retained education amounts; and
  - The percentage share that the Bruce Generating and other industry properties represent.



- While not solely attributable to the prevailing assessment mythologies for generating and other electricity industry properties, the pattern of persistent decline is exceptionally clear.

### **OBSERVED DECLINE, DRIVING FACTORS AND IMPLICATIONS**

- The bulk of MTE’s underlying study and the preceding content has been prepared to document the actual, historic property tax outcomes of Bruce Generating and other industry property.
- Results leave little doubt that the application of static unit-value assessments and other methodologies have driven a persistent pattern of decline for the revenue contributions of these properties.
- A significant portion of both relative and absolute decline can be attributed to the fact that while most assessment values changed with real world market dynamics, the valuations of the subject properties are inextricably tied to the realities of the late 1990’s and early 2000’s.
  - Overall, aggregate market change between 2008 and 2020 for taxable property was approximately 80%;
  - Over the same three reassessments, the change for Bruce Generating properties was approximately 5%.
- Considering this discrepancy alone, the observed shifts were inevitable, however, the most important take-away from this historic picture is the clear warning it presents for future implications if the status quo approaches prevail.

## **FORWARD LOOKING ISSUES**

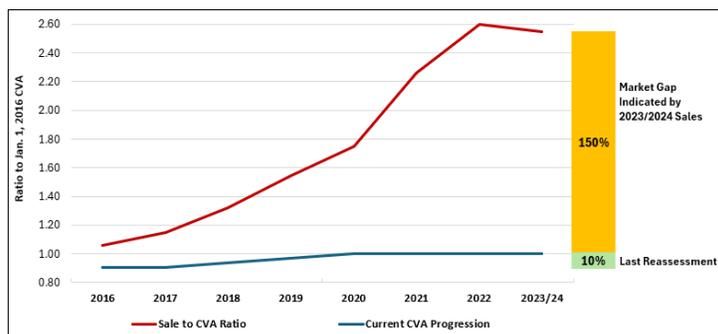
### **Pending Risks and Exposure**

## CONSIDERING THE MARKET GAP AND NEXT REASSESSMENT

- As we have seen, the rate at which tax shares have shifted from the generating plants to other taxpayers has been largely dependent on the rate at which market-based assessments have increased.
- While we do not know exactly what the next reassessment will bring, we have enough information to know that it will be far more dramatic than any recent market update.
- The historic patterns of decline have manifested in response to relatively modest market value increases across the taxable base.
  - Overall, aggregate market change between 2008 and 2020 (3 updates) was approximately 80%;
- Current market indicators suggest that the next reassessment could bring market value increases double this magnitude.
  - If such increases were to materialize with no changes to the valuation of Bruce Generating properties, the impacts on the remainder of Kincardine's taxpayers would be unprecedented and likely unmanageable.

## CONSIDERING THE MARKET GAP AND NEXT REASSESSMENT

- This graph provides a visual indication as to the potential magnitude of the of the next reassessment in comparison the last reassessment.



**Interpretation Notes:**

- The **Blue Line** documents the progression of CVA over the current reassessment cycle.
- The **Red Line & Gold Column** represent the gap between what properties are selling for in the real world and what they are being taxed on.
- This observed Market Gap provides an indication as to the potential magnitude of the next reassessment.

- **High level estimates suggest that if the Bruce Generating properties remain static in the face of even a 100% increase in taxable property, the plants' share of the local levy could decline by 50% or more in only four years.**

# SUMMARY OBSERVATIONS AND CONCLUDING COMMENTS



## KEY OBSERVATIONS

**Persistent Tax Share Decline:** Over three reassessment cycles, the share of the tax burden carried by the Bruce Generating Stations and other electricity industry properties has been in constant decline.

**Non-Market Valuation Models:** These shifts have been driven in large part by the use of non-market valuation methods, particularly per-square-metre unit values.

**Growth Driven Shifts:** A small proportion of observed shifts have simply occurred due to the growth and expansion of other tax base segments.

**Levy and Levy Increase Implications:** While annual inflationary changes are evident, they have not offset the shifting tax burdens from hydro properties to other taxpayers.

**Market Value Gaps:** Prolonged reliance on 2016 CVAs has created stark disparities between assessed and actual market values.

**Future Disruptions:** Without changes to the assessment of generating properties, the next reassessment cycle could trigger unprecedented tax shifts and disruptions.

## SUMMARY AND ONGOING EFFORTS

- It is critical to confirm that the challenges outlined and discussed here originate from the special assessment treatment of generating properties mandated by the Provincial regulatory framework.
  - This is not a local payment issue, nor does it reflect traditional concerns about assessment quality or accuracy.
  - Instead, these are matters of Provincial policy, requiring action at the Provincial level to avoid or mitigate the disruptive tax shifts expected in the future.
- Municipal representatives have already begun proactive outreach to strategic partners and provincial actors to raise awareness of these issues and advocate for change.
- These efforts have been met with positive responses from staff, political figures, and various associations, many demonstrating an appreciation for the concerns and a willingness to engage.
- To ensure meaningful progress, ongoing advocacy is essential, and MTE suggests that priority should be given to:
  - Establishing these issues as priorities within the Province’s ongoing property tax system review; and
  - Aligning the need for reform with the growing focus on the viability and expansion of expanding Ontario’s electricity generating capacity.

## Open Forum Q&A



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