



September 18, 2024

**VIA RESS**

Ontario Energy Board  
P.O. Box 2319,  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4  
Attention: Registrar

Dear Ms. Marconi,

**Re: Toronto Hydro-Electric System Limited ("Toronto Hydro")  
Application for electricity distribution rates and other charges beginning January  
1, 2025  
Board File No.: EB-2023-0195**

We are counsel to the Distributed Resource Coalition ("**DRC**") in the above-noted proceeding. Please find attached the submissions of DRC on Toronto Hydro's proposed Innovation Fund, filed pursuant to Procedural Order No. 7.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel Vollmer".

DT Vollmer

c. All parties

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** the Ontario Energy Board Act, 1998, Schedule B to the Energy Competition Act, 1998, S.O. 1998, c.15 (the “**OEB Act**”);

**AND IN THE MATTER OF** an Application by Toronto Hydro-Electric System Limited (“**Toronto Hydro**”) for an Order or Orders approving or setting just and reasonable distribution rates and other charges, effective January 1, 2025 to December 31, 2029.

**EB-2023-0195**

**WRITTEN SUBMISSIONS**  
**OF**  
**DISTRIBUTED RESOURCE COALITION**  
**(“DRC”)**

**September 18, 2024**

## OVERVIEW

1. We are counsel to the Distributed Resource Coalition (“**DRC**”) in Toronto Hydro’s application to the Ontario Energy Board (the “**OEB**” or “**Board**”) for an order or orders approving or setting just and reasonable distribution rates and other charges, effective January 1, 2025 to December 31, 2029 (the “**Application**”).
2. DRC strongly supports Toronto Hydro’s proposed Innovation Fund, which reflects a positive and proactive attempt towards meeting the challenges of the ongoing energy transition. The Innovation Fund also offers significant and important support towards the integration of distributed energy resources (“**DERs**”), which DRC believes is an essential aspect of any successful effort on the part of Toronto Hydro to promote electrification and decarbonization.
3. DRC also believes, however, that there are certain points where Toronto Hydro’s current proposal could be improved. In particular, DRC believes that the Board should approve the Innovation Fund, subject to the following amendments and conditions:
  - (a) Toronto Hydro’s proposed evaluation considerations present a very good foundation, but should be expanded to include considerations that specifically encourage support for pilots relating to electric vehicle (“**EV**”) bi-directional charging;
  - (b) Toronto Hydro’s proposed pilots also present a very good initial set of priorities, but should be expanded to include pilots relating to multi-unit residential charging, EV street charging, and electric school buses;
  - (c) the Innovation Fund’s governance structure should be amended to include external participants on the Innovation Fund’s steering committee; and
  - (d) the Innovation Fund should also be amended to include stronger reporting requirements.
4. Finally, DRC also believes that the Board should increase the Innovation Fund’s allocated funding to a level that is consistent with the mid-range of comparable utilities. The importance of innovation in the energy sector means that utilities should be strategic and efficient, but also bold in pursuing innovative goals and the funding necessary to pursue them. DRC therefore proposes that the Innovation Fund should have funding levels set at

an amount equal to 0.5% of Toronto Hydro's revenue requirement, representing a modest increase from the Application's proposed 0.3%.

5. DRC's submissions are organized as follows:
  - (a) Background on DRC;
  - (b) DRC's support for Toronto Hydro's goals and rationale for the Innovation Fund;
  - (c) DRC's support for the Innovation Fund's proactive approach to innovation as an important step forward for the adoption of DERs;
  - (d) DRC's support for the proposed evaluation considerations, subject to certain additions that prioritize bi-directional charging;
  - (e) DRC's support for the proposed pilots, subject to certain additions;
  - (f) DRC's belief that the Innovation Fund's governance structure should be amended to include external participants on its Steering Committee;
  - (g) DRC's belief that the Innovation Fund's reporting requirements should be strengthened; and
  - (h) DRC's belief that Toronto Hydro should be entitled to support the Innovation Fund at funding levels that are consistent with the mid-range of comparable innovation funds.

### **Relevant Background On DRC**

6. DRC is a group of electricity customers and consumers, consisting of end-use residential customers, non-profit organizations, and owners' associations. DRC's members are directly affected by and interested in: (i) optimizing existing energy assets; (ii) efficiently facilitating the integration of existing and innovative DERs, including EVs, to achieve customer and grid solutions; and (iii) providing input on direct customer needs and local distribution company opportunities relating to EVs. DRC's members for this proceeding include the Electric Vehicle Society ("**EVS**") and Plug'n Drive ("**PnD**").
7. DRC represents end-use residential customers with DERs that may act as producer-consumers, or "prosumers", in a bi-directional electricity grid. It is the only intervenor before

the Board in this Application that is focused squarely on innovative solutions and the new context of electricity distribution that is, and will be, significantly impacted by DERs.

8. DRC therefore believes that it offers unique and significant expertise on DERs and the innovation activities, infrastructure, and funding necessary to support their integration into Toronto Hydro's system, which are the central remaining questions at issue in this proceeding.

### **DRC Supports Toronto Hydro's Goals and Rationale for the Innovation Fund**

9. DRC strongly supports Toronto Hydro in its recognition that the energy transition and efforts to decarbonize mean that the energy sector faces fundamental change, even if there are "degrees of uncertainty" as to how that change will take place.<sup>1</sup>
10. Recent Letters of Direction from Ontario's Minister of Energy support the understanding that Ontario has entered into a period of energy transition in which fundamental change will take place. For example, the Minister of Energy's October 2022 Letter of Direction articulated the Ontario Government's "vision for the energy system in which Ontario leverages its clean energy grid to promote electrification and job creation while continually enhancing reliability, resiliency and customer choice."<sup>2</sup>
11. The promotion of electrification offers extensive benefits for Ontario. DRC firmly believes that electrification is by far the most promising pathway towards decarbonizing Ontario's energy sector and its economy more broadly. The potential payoff is a rejuvenated energy sector that satisfies the energy needs of Ontario in a way that is more reliable, affordable, and sustainable.
12. DERs, in particular, provide significant benefits in terms of reliability, flexibility, sustainability, and affordability for Ontario's electricity market. These benefits will become increasingly evident as more electricity customers, grid operators and service providers consider and adopt DERs (i.e., non-wires solutions) to meet on-site electricity demand, fulfill local

---

<sup>1</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 3 of 17.

<sup>2</sup> Ministry of Energy, [Letter of Direction from the Minister of Energy to the Chair of the OEB Board of Directors](https://www.oeb.ca/sites/default/files/letter-of-direction-from-the-Minister-of-Energy-20221021.pdf) (October 21, 2022). [https://www.oeb.ca/sites/default/files/letter-of-direction-from-the-Minister-of-Energy-20221021.pdf]

electricity needs and provide wholesale market services (i.e., capacity, energy and ancillary services).<sup>3</sup>

13. The IESO has consistently expressed the view that DERs offer extensive benefits for Ontario's energy sector. A recent IESO study notes that DERs have been demonstrated to serve as a cost-effective solution for avoiding or deferring investment needs in the transmission and distribution system in many jurisdictions across North America.<sup>4</sup>
14. The IESO has elsewhere identified the following benefits of DER adoption in Ontario:
  - (a) reduce reliance on the provincial electricity grid by supplying some (or all) of the energy needed for a home, facility or business, which helps lower electricity bills;
  - (b) can be located close to urban centres, which limits (or avoids) the need for new or upgraded transmission lines; and
  - (c) can be connected to the local or provincial grid, providing back-up power during emergencies.<sup>5</sup>
15. The benefits of DERs compared to building transmission for centralized generation include faster installation times, reduced energy losses, and lower transmission costs, which contribute to a more affordable energy supply. Since DERs are typically smaller and built on existing sites (like rooftop solar), they are quicker to deploy and face fewer regulatory barriers. Additionally, those investing in DERs, such as homeowners or businesses, directly benefit from the energy they produce, unlike larger utility-scale projects.<sup>6</sup>
16. Nevertheless, the promotion of electrification and the integration of technologies like DERs represents a massive undertaking, requiring bold efforts across Ontario's energy sector. Ontario must be proactive and not passive if it wishes to achieve the positive outcomes that electrification offers, and a proactive approach necessarily entails support for innovation, as

---

<sup>3</sup> IESO, "[Ontario's Distributed Energy Resources \(DER\) Potential Study, Volume I: Results and Recommendations](https://ieso.ca/-/media/Files/IESO/Document-Library/engage/derps/derps-20220930-final-report-volume-1.pdf)", (28 September 2022), p. 1. [https://ieso.ca/-/media/Files/IESO/Document-Library/engage/derps/derps-20220930-final-report-volume-1.pdf]

<sup>4</sup> *Ibid* p. 14.

<sup>5</sup> IESO, "[Distributed Energy Resources](https://www.ieso.ca/en/Learn/Ontario-Electricity-Grid/Distributed-Energy-Resources)", (online). [https://www.ieso.ca/en/Learn/Ontario-Electricity-Grid/Distributed-Energy-Resources]

<sup>6</sup> Resources for the Future, "[Expanding the Possibilities: When and Where Can Grid-Enhancing Technologies, Distributed Energy Resources, and Microgrids Support the Grid of the Future?](https://media.rff.org/documents/Report_23-13.pdf)", (September 2023), p. 15. [https://media.rff.org/documents/Report\_23-13.pdf]

well as support for utilities that seek to innovate, as an essential core of this proactive approach.

17. A proactive approach is not only in the long-term interests of Ontario ratepayers, it is also entirely consistent with section 1 of the OEB Act, which sets out the priority of facilitating innovation in the sector as one of the Board's four central objectives.
18. For these reasons, DRC strongly agrees with Toronto Hydro when it notes:

Innovation is a key tool for managing within this uncertainty by building new capabilities to adapt to change and by leveraging technology to achieve expanded benefits for customers.<sup>7</sup>

**Toronto Hydro's Proactive Approach to Innovation Is an Important Step Forward for the Adoption of DERs**

19. Toronto Hydro is correct to recognize that the utility must take a proactive approach when it comes to innovation. It is essential for utilities around the world to explore what new technologies are best suited to the unique circumstances they face.
20. DRC therefore fully supports Toronto Hydro's recognition that it will be necessary to develop solutions that "meet the specific needs and challenges of a dense urban city with a diverse customer base."<sup>8</sup>
21. DRC similarly believes that utilities should be supported in efforts to explore work that is "more early stage, exploratory and developmental in nature".<sup>9</sup> Toronto Hydro should be allowed to explore projects that offer large long-term benefits for ratepayers, despite current uncertainties that a proposal may present.
22. The proactive approach taken by Toronto Hydro toward innovation is crucial for the expanded adoption of DERs due to the unique challenges and opportunities they present in urban environments. Toronto Hydro and other utilities must adapt to the specific needs of their service areas, and Toronto, with its diverse customer base and relatively dense infrastructure, requires solutions suited to its dense urban landscape. This ensures that Toronto Hydro can explore early-stage, exploratory projects that may have large, long-term

---

<sup>7</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 3 of 17.

<sup>8</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 3 of 17.

<sup>9</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 4 of 17.

benefits for the utility, ratepayers, and other stakeholders. Sufficient support and funding for innovation is essential for enabling the wider adoption of DERs that can effectively integrate into Toronto Hydro's system, reducing reliance on centralized generation, and ultimately providing cost savings and greater resilience to the distribution system.

23. Enabling innovation also allows Toronto Hydro to address unique energy system and infrastructure challenges that it faces such as balancing localized energy generation with local demand. This is essential for mitigating Toronto Hydro's anticipated climate and energy demand risks, as well as ensuring that DER solutions not only meet immediate system needs but also contribute to long-term sustainability and affordability.
24. DRC also believes that Toronto Hydro's proposed use of pilot projects as the mechanism to test new distribution capabilities is the best approach. Pilot projects supported through the Innovation Fund will allow testing and evaluation to take place at a smaller scale that reduces risk, while still offering the potential to scale initiatives into standard capital or operational work programs should the pilot prove successful.<sup>10</sup>
25. The proposed projects and approach will allow Toronto Hydro to evaluate new technologies in a controlled, small-scale environment. This reduces the risks associated with large-scale deployments while still offering the opportunity to gather valuable insights regarding emerging technologies. Pilot projects supported by the proposed Innovation Fund can test different DER configurations and distribution strategies, providing data that can inform whether these initiatives should be expanded into full-scale operational programs or provide more localized benefits and energy solutions.
26. DER-focused pilot projects also offer a relatively low-risk approach that is essential for exploring new and emerging technological solutions and ensuring their viability before committing to broader implementation, benefiting both ratepayers and the distribution system.

---

<sup>10</sup> See Application, Exhibit 1B, Tab 4, Schedule 2, page 6 of 17.



**DRC Supports the Innovation Fund’s Proposed Evaluation Considerations, Subject to Certain Additions**

27. The considerations that Toronto Hydro has proposed to guide the evaluation of proposals under the Innovation Fund<sup>11</sup> will help to achieve the objective of facilitating DER integration. DRC therefore supports Toronto Hydro’s proposed considerations as they relate to DERs as follows:

The innovation project explores a distribution capability that is connected to adapting to fundamental change in the energy landscape as identified in or related to expectations set out by the OEB for DER integration in the FEI report,<sup>12</sup> mainly:

- Evolving and enhancing load forecasting, considering DER adoption;
  - Making enabling investments such as system monitoring and data analytics;
  - Adjusting operational practices to incorporate and manage DERs on the system, including dispatching and use as non-wires-alternatives;
  - Modifying planning processes to identify, assess, and implement non-utility-owned DER solutions; and
  - Developing skills and knowledge, and acquiring talent.<sup>13</sup>
28. DRC supports Toronto Hydro in its identification of DER integration as a priority for the Innovation Fund on the basis that pursuing DER pilots will produce large benefits through pilot projects and experimentation.
29. Nevertheless, DRC believes that Toronto Hydro’s proposed evaluation considerations could be improved with the addition of considerations that specifically encourage support for pilots relating to EV bi-directional charging.
30. Bi-directional EV charging is a key tool in reducing both costs and emissions in Ontario’s energy system. PnD’s recent study on EV batteries highlights several anticipated benefits related to using EVs as mobile storage through bi-directional charging.<sup>14</sup> By discharging EV batteries during the day, grid demand can be reduced, further reducing reliance on natural gas-fired generation. This reduction in natural gas demand leads to lower system costs as

---

<sup>11</sup> See Technical Conference, April 11, 2024, page 98.

<sup>12</sup> OEB, “Framework for Energy Innovation: Setting a Path Forward for DER Integration” (January 30, 2023), p. 3.

<sup>13</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 7 of 17.

<sup>14</sup> PnD, “[EV Batteries Value Proposition for Ontario’s Electricity Grid and EV Owners](#)”, (July 2020), p. 33.

[<https://www.plugndrive.ca/wp-content/uploads/2020/07/EV-Batteries-Value-Proposition-FULL.pdf>]

less gas is purchased. The study notes that new and shifted energy demand is created at night, when EVs are charging, providing revenue for the system, especially if the energy comes from Ontario's hydro and nuclear base-loads, which have fixed operational costs.

31. Furthermore, bi-directional charging allows clean night-time electricity to displace natural gas-fired generation during the day, reducing greenhouse gas emissions and avoiding carbon charges associated with natural gas generation.
32. DRC therefore requests that the OEB approve Toronto Hydro's proposed considerations, subject to an express condition that Toronto Hydro must include support for bi-directional charging innovation among its priority projects.

**DRC Supports the Innovation Fund's Proposed Pilots, Subject to Certain Additions**

33. DRC supports each of the pilots that Toronto Hydro has suggested could be supported by an approved Innovation Fund. In particular:
  - (a) EV commercial fleet charging enables businesses with EV fleets to use their EVs as mobile DER energy storage in a way that benefits both the grid and their operations. This pilot would help to smooth grid demand, reduce peak loads, and increase overall system efficiency by scheduling charging during off-peak periods or using energy stored in EV batteries during high demand times.
  - (b) An EV demand response pilot would turn EVs into DERs where EV charging can be adjusted based on grid needs. This can provide enhanced grid flexibility, balance demand during peak periods, and support renewable energy integration.
  - (c) Advanced microgrids can integrate various DERs, such as solar panels, batteries, and EVs, ensuring there is a reliable power supply and reducing reliance on centralized generation. This can support the wider adoption of DERs by piloting how they can be seamlessly integrated into Toronto Hydro's distribution system.
  - (d) DRC agrees with Toronto Hydro's statement that flexible connections pilots "could enable new DER customers to be connected to otherwise constrained parts of the grid without having to build costly infrastructure."<sup>15</sup>

---

<sup>15</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 3-4 of 17.

34. However, DRC also believes that three pilots should be added to Toronto Hydro's list of priority pilots:

- (a) **Multi-unit residential charging.** There are currently no universal regulations requiring EV readiness in multi-unit residential buildings in Toronto, where a large percentage of the city's population lives. This creates a real risk that ratepayers will face higher rates over the long term, or complete exclusion from reliable access to EV charging, since retrofits are far more costly than the cost of installation at the time of construction. Toronto Hydro should explore innovation in multi-unit residential charging, including:
  - (i) community charging for those in multi-unit residences currently without reliable access;
  - (ii) initiatives, such as retrofit pilot projects, that will increase and improve access in multi-unit residences and overcome existing challenges relating to the cost of retrofits; and
  - (iii) pilots that explore best practices in EV charging for the purposes of recommending their inclusion in applicable building codes.
- (b) **Bring your own cord ("BYOC") street charging.** BYOC charging can assist Toronto Hydro customers in areas where space and access are limited or where they lack private driveways or garages. A BYOC pilot would address the growing demand for convenient, curbside charging while helping Toronto Hydro avoid complex utility upgrades. Such a pilot would speed up the deployment of EV charging infrastructure compared to traditional charges and may also improve the reliability of the charging network, reduce maintenance costs, and allow chargers to be integrated into existing infrastructure, such as streetlights or building exteriors, making Toronto Hydro's charging infrastructure system less intrusive.<sup>16</sup>

---

<sup>16</sup> U.S. Department of Energy, "[Community Charging: Emerging Multifamily, Curbside, and Multimodal Practices](https://driveelectric.gov/files/community-embodility-charging.pdf)", (February 2024), *Joint Office of Energy and Transportation*, pp. 15-16. [https://driveelectric.gov/files/community-embodility-charging.pdf]

(c) **An electric school bus pilot, including exploration of V2G.** A technical briefing prepared by Dunsky Energy + Climate Advisors (“**Dunsky**”) for the Canadian Electric School Bus Alliance notes the following:

(i) “[School buses] spend 80% of weekdays during the school year sitting idle, and for nearly 50% of the year they're not used at all. The potential to harness the energy stored in these mobile batteries is significant, provided this downtime aligns with periods when V2G resources would be beneficial to the grid.”<sup>17</sup>

An electric school bus pilot would enable Toronto Hydro to realize financial and energy benefits. For example, Dunsky estimated the following annual V2G revenue potential for utilities in Ontario stemming from (i) avoided capacity, (ii) arbitrage, and (iii) ancillary (operating reserve, frequency regulation, voltage support, blackout start):<sup>18</sup>

2023	2024	2025	2026	2027	2028	2029	2030
\$3,170	\$3,140	\$3,120	\$3,170	\$3,210	\$3,250	\$3,290	\$3,340

35. DRC therefore requests that the OEB’s approval of the Innovation Fund include the express condition that Toronto Hydro must include pilots for multi-unit residential charging, BYOC street charging, and an electric school bus pilot among its priority pilots.

**DRC Believes the Innovation Fund’s Governance Structure Should Include External Participants on the Steering Committee**

36. DRC believes that Toronto Hydro’s proposed governance framework requires improvement in order to provide the “transparency and accountability to ratepayers”<sup>19</sup> that Toronto Hydro intends. In particular, the Board should require that Innovation Fund’s steering committee to include representation from outside Toronto Hydro.

<sup>17</sup> Canadian Electric School Bus Alliance, “[Vehicle-to-Grid \(V2G\) and Electric School Buses](https://schoolbusalliance.ca/wp-content/uploads/2023/09/V2G-and-Electric-School-Buses.pdf)”, (August 2023), p.7. [https://schoolbusalliance.ca/wp-content/uploads/2023/09/V2G-and-Electric-School-Buses.pdf]

<sup>18</sup> *Ibid.*

<sup>19</sup> See Application, Exhibit 1B, Tab 4, Schedule 2, page 8 of 17.

37. It bears noting at the outset that Toronto Hydro has confirmed that its review of the characteristics of innovation funds in comparable jurisdictions did not include a review of governance frameworks.<sup>20</sup> In other words, it does not invoke a precedent for the purposes of supporting its proposed governance structure in this proceeding.

38. The Innovation Fund's current proposal is for "a steering committee of senior utility leaders [to oversee] the four-phase governance framework.... The committee is responsible for approving key decisions with respect to the project such as scope, budget, and timelines."<sup>21</sup>

39. Toronto Hydro has not yet identified the specific individuals who will constitute the committee:

The senior leaders and project owners will be determined upon approval of the Innovation Fund proposal and other material requests outlined in this rate application.<sup>22</sup>

40. Toronto Hydro confirmed at the technical conference that the proposed senior utility leaders would come exclusively from within the company, as opposed to drawing on individuals in some cases from outside the company.<sup>23</sup>

41. The input of experts external to the company would therefore be limited to Toronto Hydro's stakeholder engagement process, which it has summarized as follows:

To inform the pilot project selection process, Toronto Hydro would engage with external stakeholders to present ideas and solutions that are being considered for the deployment of the Innovation Fund.<sup>24</sup>

42. DRC believes that formally incorporating outside perspectives and experience into Toronto Hydro's selection process would improve the Innovation Fund's credibility as well as the expertise available to it when evaluating potential projects.

43. Accordingly, DRC proposes the following modifications to the Innovation Fund's governance structure:

---

<sup>20</sup> Undertaking No. JT5.24.

<sup>21</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 9 of 17.

<sup>22</sup> Interrogatory Responses, 1B-DRC-06, Response I.

<sup>23</sup> Technical Conference, April 11, 2024, page 132.

<sup>24</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 10 of 17.

- (a) **Governance.** Innovation fund projects would continue to be selected by a Steering Committee, consistent with Toronto Hydro's proposal.
  - (b) **Steering Committee Composition.** In addition to representatives from Toronto Hydro, Toronto Hydro shall invite representatives to sit on the committee from the IESO, OEB, the City of Toronto, and sector and ratepayer stakeholders with expertise in the kinds of projects most likely to attract support under the Innovation Fund's priorities and evaluation considerations. At least 40% of the steering committee shall consist of members not employed or otherwise affiliated with Toronto Hydro.
  - (c) **Steering Committee Compensation.** Steering committee members who are not employees of Toronto Hydro or representatives of government organizations already compensated for their time should be entitled to compensation at applicable OEB rates.
44. DRC believes that these improvements will help to ensure that funding for the Innovation Fund goes to the most effective projects, while maintaining the credibility of innovation funding as an objectively important exercise that is undertaken for the benefit of ratepayers, as opposed to corporate interests.

**DRC Believes the Innovation Fund Should Include Stronger Reporting Requirements**

45. DRC similarly believes that Toronto Hydro's reporting requirements for the Innovation Fund should be strengthened so as to ensure a high degree of transparency and to support the credibility of the selected projects.
46. The Application provides that Toronto Hydro would share the pilot evaluation and learnings report with the OEB Innovation Sandbox team, and through the Sandbox the learnings could be further shared with industry stakeholders as the OEB deems suitable.<sup>25</sup>
47. The limited reporting that Toronto Hydro proposes represents a missed opportunity to use the Innovation Fund as an effective early precedent for innovation in the sector more broadly. Increased information flows will allow the sector to learn from the Innovation Fund's

---

<sup>25</sup> Application, Exhibit 1B, Tab 4, Schedule 2, p.16.

experiences, ideally establishing a platform for a competitive landscape in Ontario where utilities consistently seek to improve upon the experiences of others.

48. Accordingly, DRC proposes that Toronto Hydro should be required to report on the following information in addition to existing reporting requirements:
- (a) **Annual Report.** An annual report, which has been subjected to input, review and approval by the steering committee, and which is subsequently posted along with any relevant data resulting from the projects on Toronto Hydro's website so that other utilities benefit from the lessons learned and conduct their own analysis using the data.
  - (b) **Publicly Available Project Results.** The default presumption should be that project results will be public, subject to confidentiality claims for which Toronto Hydro may apply to the OEB. Toronto Hydro will work with IESO, OEB and the steering committee to share project information and results with stakeholders (including relevant LDCs).
  - (c) **Performance Metrics.** Project results and reporting should include the following performance metrics, as applicable:
    - (i) customer cost savings impacts;
    - (ii) reliability impacts;
    - (iii) accessibility impacts;
    - (iv) GHG reduction impacts (scope 1, 2 and 3), using the GHG Protocol where applicable; and
    - (v) cybersecurity impacts.
49. Each of these elements would do much to stimulate innovation both within and outside of Toronto Hydro's service territory, including other regulated utilities in Ontario, which is a valuable objective given the energy transition's accelerating pace.

### **DRC Believes Toronto Hydro's Proposed Funding Levels Should Be Increased**

50. DRC believes that the importance of innovation in the energy sector means that utilities should be strategic but bold in their funding requests, not conservative and excessively cost-conscious.
51. Toronto Hydro has proposed funding levels that are low considering the objectives of the Innovation Fund, such that the Board should increase funding levels from proposed amounts so that they compare with the average level of spending in comparable jurisdictions, not the low range.
52. Toronto Hydro has stated that its proposed funding levels fall on the lower end of the range relative to comparable utilities:

Toronto Hydro's research revealed that utility investments across comparable innovation initiatives and research and development activities range from 0.3 to 1 percent of revenues. Accordingly, the utility proposes to allocate 0.3 percent of its revenue requirement, or approximately \$16 million, to the 2025-2029 Innovation Fund.<sup>26</sup>

53. Toronto Hydro explained its rationale for adopting the low end of the identified range as follows:

Recognizing the novelty of this proposal in the Ontario electricity distribution sector context, Toronto Hydro decided to adopt the low-end of this range.<sup>27</sup>

54. Setting proposed funding at the mid-range of the range that Toronto Hydro identified would mean the following:

If Toronto Hydro was to fund its Innovation Fund through a rate rider based on the mid-range of what it found in its research, Toronto Hydro would calculate an amount equal to 0.5% of its Revenue Requirement instead of 0.3%, which would result in approximately \$27 million of funding for the Innovation Fund.<sup>28</sup>

55. Toronto Hydro has confirmed that an increase in funding would likely mean that "Toronto Hydro could propose more areas of innovation and/or more pilot projects or larger scale pilot projects within the planned areas of innovation."<sup>29</sup>

---

<sup>26</sup> Application, Exhibit 1B, Tab 4, Schedule 2, page 5 of 17.

<sup>27</sup> Interrogatory Responses, 1B-Staff-11, Response B.

<sup>28</sup> Interrogatory Responses, 1-ED-02, Response B.

<sup>29</sup> Interrogatory Responses, 1-ED-02, Response C.



56. DRC is highly supportive of the kinds of outcomes that Toronto Hydro has confirmed would likely result from increased innovation funding. These are precisely the kinds of projects that will produce benefits for ratepayers, including long-term cost savings, environmental gains, and increased accessibility and reliability.
57. Accordingly, DRC requests that funding for the Innovation Fund be set at an amount equal to 0.5% of Toronto Hydro's revenue requirement, representing an increase from the Application's proposed 0.3%.

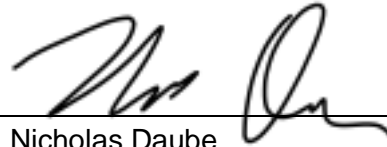
## **CONCLUSION AND RELIEF REQUESTED**

58. For the reasons above, DRC strongly supports Toronto Hydro's positive attempts to meet the challenges of the energy transition. The Innovation Fund represents an important effort that supports Ontario's efforts to decarbonize in a way that offers potential long-term affordability, reliability, and access benefits to Toronto Hydro's ratepayers.
59. DRC is especially supportive of the Innovation Fund's efforts to facilitate the integration of DERs, which DRC believes is an essential aspect of any successful effort on the part of Toronto Hydro, and Ontario more broadly, to promote electrification and decarbonization.
60. DRC also believes, however, that there are certain points where Toronto Hydro's current proposal could be improved, as detailed above, including by increasing funding levels for Toronto Hydro's proposal.
61. Accordingly, DRC respectfully requests that the Board approve Toronto Hydro's Innovation Fund subject to the following conditions and amendments:
  - (a) Toronto Hydro's proposed evaluation considerations should be amended to include an additional express condition that Toronto Hydro must include support for bi-directional charging innovation among its priority projects;
  - (b) Toronto Hydro's proposal should be amended to include the express condition that Toronto Hydro must include pilots for multi-unit residential charging, BYOC charging, and an electric school bus pilot among its priority pilots;
  - (c) The following modifications should be made to the Innovation Fund's governance structure:

- (i) **Steering Committee Composition.** In addition to representatives from Toronto Hydro, Toronto Hydro shall invite representatives to sit on the committee from the IESO, OEB, the City of Toronto, and sector and ratepayer stakeholders with expertise in the kinds of projects most likely to attract support under the Innovation Fund's priorities and evaluation considerations. At least 40% of the steering committee shall consist of members not employed or otherwise affiliated with Toronto Hydro.
  - (ii) **Steering Committee Compensation.** Steering committee members who are not employees of Toronto Hydro or representatives of government organizations already compensated for their time should be entitled to compensation at applicable OEB rates.
- (d) Toronto Hydro should be required to report on the following information in relation to the Innovation Fund in addition to existing reporting requirements:
- (i) **Annual Report.** An annual report, which has been subjected to input, review and approval by the steering committee, and which is subsequently posted along with any relevant data resulting from the projects on Toronto Hydro's website so that other utilities benefit from the lessons learned and conduct their own analysis using the data;
  - (ii) **Publicly Available Project Results** The default presumption should be that project results will be public, subject to confidentiality claims for which Toronto Hydro may apply to the OEB. Toronto Hydro will work with, IESO, OEB and the Steering Committee to share project information and results with stakeholders (including relevant LDCs);
  - (iii) **Performance Metrics.** Project results and reporting should include the following performance metrics, as applicable:
    - (1) Customer cost savings impacts;
    - (2) Reliability impacts;
    - (3) Accessibility impacts;

- (4) GHG reduction impacts (scope 1, 2 and 3), using the GHG Protocol where applicable; and
  - (5) Cybersecurity impacts;
- (e) The Innovation Fund should have funding levels set at an amount equal to 0.5% of Toronto Hydro's revenue requirement, representing an increase from the Application's proposed 0.3%.

ALL OF WHICH IS RESPECTFULLY  
SUBMITTED THIS  
18<sup>th</sup> day of September, 2024.

A handwritten signature in black ink, appearing to read 'Nick Daube', written over a horizontal line.

Nicholas Daube  
Resilient LLP  
Counsel for DRC