

## INDEPENDENT PRACTITIONER’S LIMITED ASSURANCE REPORT

To the management of Liberty Utilities (Canada) Corp.,

We have been engaged by Liberty Utilities (Canada) Corp. to undertake a limited assurance engagement on certain Subject Matter Information of Algonquin Power & Utilities Corp. (“the Company”), included in the Company’s 2023 ESG Report Appendix – Environmental Metrics Table (the “Report”) in Appendix A and as described below, for the year ended December 31, 2022.

### Subject Matter Information and Applicable Criteria

Subject Matter Information	Units	Applicable Criteria
Scope 1 GHG emissions	2,542,820 tonnes CO <sub>2</sub> e	Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition (the ‘GHG Protocol’)
Scope 2 GHG emissions (location-based) and (market-based)	89,200 tonnes CO <sub>2</sub> e	Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition (the ‘GHG Protocol’)  GHG Protocol Scope 2 Guidance, an amendment to the GHG Protocol Corporate Standard
Scope 3, Category 3 GHG emissions – Fuel and energy related activities not included in scope 1 and 2	1,161,196 tonnes CO <sub>2</sub> e	Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition (the ‘GHG Protocol’)  GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Supplement to the GHG Protocol Corporate Accounting and Reporting Standard
Scope 3, Category 11 GHG emissions – Use of Sold Products: Downstream Natural Gas Combustion	2,205,268 tonnes CO <sub>2</sub> e	
Scope 3, Category 15 GHG emissions – Investments	1,878,009 tonnes CO <sub>2</sub> e	

Other than as described in the preceding paragraph, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

### Management’s Responsibility

Management is responsible for the preparation and presentation of the subject matter information in accordance with the applicable criteria.

There are no mandatory requirements for the preparation or presentation of GHG emissions data. As such, the Company has applied the World Resources Institute/World Business Council for Sustainable Development’s Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (the ‘GHG Protocol’ and its own internally developed criteria, which are presented in Appendix A.

Management is responsible for the development of such criteria and for determining the appropriateness of the use of the applicable criteria.

Management is also responsible for such internal control as management determines necessary to enable the preparation and presentation of the subject matter information that is free from material misstatement, whether due to fraud or error.

### **Practitioner's Responsibilities**

Our responsibility is to express a limited assurance conclusion on the subject matter information based on evidence we have obtained. We conducted our limited assurance engagement in accordance with Canadian Standards on Assurance Engagements (CSAE) 3410 *Assurance Engagements on Greenhouse Gas Statements*. This standard requires that we plan and perform our engagement to obtain limited assurance about whether based on the procedures performed and evidence obtained, any matter(s) has come to our attention to cause us to believe that the subject matter information is materially misstated.

The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, it is not a guarantee that a limited assurance engagement conducted in accordance with this standard will always detect a matter that causes the practitioner to believe that the subject matter information is materially misstated.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users of our report.

The nature, timing and extent of procedures performed depends on our professional judgment, including an assessment of the risks of material misstatement, whether due to fraud or error, and involves obtaining evidence about the subject matter information.

Our engagement included: assessing the appropriateness of the underlying scope 1, scope 2 and scope 3 emissions data the suitability of the criteria used by the Company in preparing the subject matter information in the circumstances of the engagement and evaluating the appropriateness of the methods, policies and procedures used in the preparation of subject matter information and the reasonableness of estimates made by the Company. Our procedures included:

- Inquiries with relevant staff at the corporate and facility level to understand the data collection and reporting processes for the Subject Matter Information;
- Assessment of the suitability and application of the Applicable Criteria;
- Where relevant, performance of walkthroughs of data collection and reporting processes for the Subject Matter Information;
- Comparison of a sample of the reported data for the Subject Matter Information to underlying data sources;
- Inquiries of management regarding key assumptions and, where relevant, the re-performance of calculations on a sample basis;
- Completion of virtual site visits to a sample of Liberty Utilities' facilities, including walkthrough of facility level data collection and reporting processes, interviews with senior management and relevant staff and virtual site tours; and,
- Reviewing the presentation of the Subject Matter Information in the Report to determine whether it is consistent with our overall knowledge of, and experience with, the greenhouse gas emissions performance of Liberty Utilities.

Our engagement included, amongst others, the following procedures: making inquiries, primarily of persons responsible for the preparation of performance information for the Subject Matter Information, and applying analytical and other evidence gathering procedures, as appropriate.

The engagement was conducted by a multidisciplinary team which included professionals with suitable skills and experience in both assurance and in the applicable subject matter, including environmental, social and governance aspects.

### **Practitioner's Independence and Quality Management**

We have complied with the relevant rules of professional conduct/code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements* which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### **Significant Inherent Limitations**

Historical non-financial information, such as that contained in the Report, is subject to more inherent limitations than historical financial information, given the characteristics of the underlying subject matter and methods used for determining this information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable evaluation techniques, which can result in materially different measurements and can impact comparability. The nature and methods used to determine such information, as described in the applicable criteria, may change over time, and it is important to read the Company's reporting methodology available in Appendix A below.

### **Conclusion**

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. Based on the procedures performed and evidence obtained, no matters have come to our attention to cause us to believe that the Company's subject matter information for the year ended December 31, 2022, is not prepared and presented, in all material respects, in accordance with the applicable criteria.

A handwritten signature in black ink that reads "KPMG LLP". The signature is written in a cursive, slightly slanted style. Below the signature is a horizontal line that starts under the "K" and ends under the "P", with a small upward tick at the end.

### **Chartered Professional Accountants**

May 2, 2023

Vancouver, Canada

# Algonquin Power & Utilities Corp.'s 2023 ESG Report Appendix – Environmental Metrics Table

## 22 ESG Report Appendix – Greenhouse Gas (GHG) metrics

Greenhouse gas (GHG) emissions (Mt CO <sub>2</sub> e) <sup>1,2,3,4</sup>	2022	2021	2020
<b>Scope 1 emissions<sup>5</sup></b>			
Power generation - thermal <sup>6</sup>	2,250,381	1,984,603	2,297,508
Power generation - renewable <sup>7</sup>	580	472	521
Utilities - electric	12,059	17,343	6,840
Utilities - natural gas	73,662	79,728	82,037
Utilities - water/wastewater	205,916	200,228	194,139
Other uncategorized <sup>8</sup>	223	235	1,274
<b>Total Scope 1 emissions</b>	<b>2,542,820</b>	<b>2,282,609</b>	<b>2,582,317</b>
<b>Scope 2 emissions<sup>9</sup></b>			
Power generation - thermal	250	392	278
Power generation - renewable <sup>10</sup>	3,212	2,514	1,786
Utilities - electric	16,188	17,529	16,752
Utilities - natural gas	1,614	2,001	1,294
Utilities - water/wastewater	67,883	74,576	66,650
Other uncategorized	53	94	253
<b>Total Scope 2 emissions</b>	<b>89,200</b>	<b>97,106</b>	<b>87,014</b>
<b>Scope 3 emissions<sup>11</sup></b>			
Category 3 - Fuel and energy related activities (not included under Scope 1 and 2) <sup>12</sup>			
	1,161,196	1,081,376	1,088,463
Category 11 - Use of sold product <sup>13</sup>	2,205,268	2,092,670	2,102,071
Category 15 - Investments <sup>14</sup>	1,878,009	2,041,826	1,867,132

<sup>1</sup> Greenhouse gases included in calculations: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and SF<sub>6</sub>. Global Warming Potentials (100-year time horizon) published in the IPCC Fourth Assessment Report are used in the emissions calculation. All emission figures are in metric tons CO<sub>2</sub>e (Mt CO<sub>2</sub>e).

2022 Scope 1 and 2 emissions by gas type: CO<sub>2</sub>: 2,355,771 Mt CO<sub>2</sub>e, CH<sub>4</sub>: 266,185 Mt CO<sub>2</sub>e, N<sub>2</sub>O: 3,118 Mt CO<sub>2</sub>e, and SF<sub>6</sub>: 6,947 Mt CO<sub>2</sub>e.

<sup>2</sup> GHG emissions are calculated following the Greenhouse Gas Protocol Corporate Standard (GHG Protocol) and Corporate Value Chain (Scope 3) Account and Reporting Standard. Emission factors are sourced from best-practice references such as the Canadian National Inventory Report (NIR), published in 2022, USEPA's GHG Emission Factors Hub (published in 2022), IEA's Emissions Factors Database (published in 2022), and UK DEFRA's GHG Conversion Factors (published in 2022). Regarding emission factors for grid electricity, US facilities use 2020 eGRID factors published by USEPA in 2022, Chile facilities use 2020 factors published by IEA in 2022, and Canadian facilities use 2019 factors published in the 2022 NIR.

<sup>3</sup> GHG emissions are consolidated through an operational-control approach.

<sup>4</sup> Base year identification: 2017. Base year and historical year GHG emissions have been recalculated following AQN's GHG Base Year Recalculation Policy, to include full-year emissions from Liberty New York Water. A baseline recalculation is required when the following conditions are met: the facilities in operation in the reporting year changed from those in the base year in a non-organic way; changes in calculation methods, data monitoring, emissions factors and other assumptions have taken place; errors have been discovered in calculation methods and assumptions; operational boundaries have been modified in comparison to the base year; and the cumulative effect of expected changes from the base year recalculation exceed 5% of base year emissions. The recalculated Scope 1 and 2 emissions in 2017 are 3,759,264 Mt CO<sub>2</sub>e and 88,248 Mt CO<sub>2</sub>e, respectively.

<sup>5</sup> Immaterial sources include fugitive emissions - leakage of refrigerants used in buildings and release of CO<sub>2</sub> from fire extinguishers.

<sup>6</sup> This category includes AQN's thermal power generation facilities in the US and Bermuda.

<sup>7</sup> This category includes AQN's wind, solar, and hydroelectric power generation facilities that were fully operating in 2022 from both regulated and non-regulated businesses.

<sup>8</sup> This category includes all other sites that are not included in above categories, such as some office buildings. Due to the change of the GHG calculation platform starting from the 2021 reporting year, the included sites under this category in 2020 are slightly different from 2021 and onwards.

<sup>9</sup> Scope 2 emission figures are location-based. Market-based emissions are equal to location-based emissions because there are no contractual instruments used in the calculation of Scope 2 emissions.

<sup>10</sup> Historical Scope 2 emissions from renewable power generation facilities were adjusted to remove the Tinker hydroelectric facility, as it has been using self-generated renewable electricity.

<sup>11</sup> All emissions for Categories 3, 11, and 15 are calculated using actual data, obtained either through AQN's internal tracking system, or from suppliers or other value chain partners.

<sup>12</sup> This Category includes emissions from the following subcategories: 1) upstream generation emissions of distributed electricity, 2) upstream production & transmission emissions of distributed gas, 3) upstream emissions of purchased and consumed fuels, 4) upstream emissions of purchased and consumed electricity, and 5) Transmission & Distribution loss emissions of purchased and consumed electricity. Emissions were calculated by applying appropriate upstream emission factors sourced from various jurisdictions, such as the UK DEFRA and USEPA, to the amount of fuels and electricity that AQN consumed and delivered.

<sup>13</sup> This was calculated by applying the natural gas combustion emission factor sourced from USEPA's GHG Emission Factors Hub (published in 2022) to the total amount of natural gas that was delivered to industrial, commercial, and residential customers in the 2022 reporting year.

<sup>14</sup> Investment emissions were calculated by applying AQN's percentage ownership to a facility's total gross Scope 1 and 2 emissions. The reported emissions include emissions from a 7.52% and 12.04% ownership in the Plum Point and Iatan coal power plants respectively, and approximately 43-44% ownership interest (specifically, 42.90% in 2022, 43.60% in 2021, and 44.20% in 2020) in Atlantica Sustainable Infrastructure PLC. 2021 and 2020 emissions have been updated to use Atlantica's gross Scope 1 emissions.