

RDGI Fund – VNM Call Webinar

IESO Response to Stakeholder Feedback

The IESO held a public webinar on March 29th, 2018, announcing the Renewable Distributed Generation Integration (RDGI) Program Fund and the first call for applications for Virtual Net Metering (VNM) Projects. During this webinar the IESO provided information on the origin, principles and objectives of the program, potential investigation topics for future funding calls and an outline for the first call for applications for VNM Projects. The IESO invited stakeholders to provide feedback on the materials presented.

IESO received feedback from the following stakeholders and their full feedback can be found on the [RDGI Fund Stakeholder Engagement page](#):

- Alectra Inc
- AMP
- Bullfrog Power
- CanSIA
- David Suzuki Foundation
- DER AC
- EDA
- Essex Energy
- Hydro Ottawa
- Prowind Renewables
- S2e Technologies
- Spark Power
- Waterloo North Hydro

The following responses have been developed for the purpose of assisting Applicants and other interested parties in understanding the VNM Call for Applications process and are for informational purposes only. In the event there is any conflict or inconsistency between this document and the VNM Call for Applications Guidelines, the VNM Call for Applications Guidelines govern. Any capitalized terms not defined herein have the meaning as stated in Appendix A of the VNM Call for Applications Guidelines. Unless otherwise stated, section references are references to the VNM Call for Applications Guidelines. Responses are generally organized by theme, prevalence, and consensus.

1. Regarding: Flexibility

Respondents suggested that program design not be overly prescriptive to allow applicants flexibility to maximize innovation and creativity and ultimately provide more learnings.

IESO Response: The objective of the VNM Call for Applications is to generate learnings that will inform future VNM policies and regulations and to this end the IESO is looking for a diversity of business model configuration, type and size of generation facility(ies), customer class, type of load customer pool (few or many), and LDC(s). Additionally the IESO expects to gain learnings in other areas of project development, operations and billing arrangements and has created a process with the necessary flexibility for it to achieve those objectives.

2. Regarding: Long Term Regulatory Regime

Respondents inquired about the length of agreements for projects accepted into the VNM Call for Applications and suggested they be generally aligned with the life of the assets of the project.

IESO Response: The term of the VNM Contribution Agreement between the IESO and the proponent shall be for a term of approximately 3 years once Commercial Operation has been achieved.

In respect of a VNM Project that has a VNM Contribution Agreement, the term of the VNM connection and billing arrangement between the proponent and its host LDC(s) shall not exceed 20 years, as specified in subsection 11. (7) of [Ontario Regulation 541/05, \("Net Metering Regulation"\)](#).

3. Regarding: Mandatory and Rated Criteria

Respondents suggested transparent and specific mandatory requirements and rated criteria for selection of VNM projects.

IESO Response: The VNM Call for Applications will have mandatory and rated criteria for selecting successful projects. Certain mandatory requirements (Eligibility Criteria) are set out in Section 3.1 of the VNM Call for Applications Guidelines. These requirements include: the need for the VNM Project to qualify as a virtual net metering demonstration project pursuant to s. 10 of the [Net Metering Regulation](#) (must be in respect of one or more renewable energy generation facilities, must be directly or indirectly connected to the distribution system, etc.), having LDC Host(s) willing to perform the required elements of the program including settlement and reporting, ability to achieve commercial operation within 18 months after execution of the Contribution Agreement, have an aggregated capacity between 200kW and 2000kW, and submit a complete application package during the Application window.

As per Section 4.2 (Project Evaluation), Applications that satisfy the mandatory criteria will then be evaluated based on four main criteria: maturity, cost, fulfilment of an identified local need and diversity

relative to other projects. Maturity will be evaluated taking into account the Applicant's experience, the credibility and viability of the Applicant's business plan, and the maturity of the VNM Project and the LDCs' proposed settlement arrangements, all as set out in the Application. Cost will be evaluated considering both the Total Application Amount and the Total Application Amount divided by the VNM Project's Nameplate Capacity. Diversity relative to other VNM Projects will be evaluated based on several dimensions of diversity including: business model configuration, type and size of generation facility(ies), customer class, type of load customer pool (few or many), and host LDC(s).

4. Regarding: Siting Restrictions and Project Location

Respondents inquired about siting and project location restrictions contained in the VNM Call for Applications Guidelines and agreements.

IESO Response: The siting restrictions for VNM Projects are specified in [Ontario Regulation 274/18 \("Siting Restrictions For Renewable Energy Generation Facilities"\)](#), which specifies that the VNM Project facility(ies):

must be located at least 15 metres away from any boundary of the property on which it is located that abuts another property unless the landowner of the other property,

- i. is a participating customer in the virtual net metering demonstration project, or*
- ii. has provided the owner or operator of the facility with written consent to locate the facility within 15 metres of the boundary."*

While there are no specific project location exclusions however projects will have to meet connection, siting and any other applicable requirements to be eligible. Part of the expected learnings the IESO hopes to determine how different electrical and physical distances between the load and generator, and locations in Ontario affect the system.

While the IESO will screen applications and reject any that are in conflict for connection capacity with commitments made under other IESO programs, the applicant will retain responsibility for all connection assessments and arrangements.

5. Regarding: Locational Value

Respondents inquired and made suggestions about the determination and consideration of locational value in the call evaluation.

IESO Response: As part of the VNM Call for Applications (see Section 4.2(a)(iii)), the IESO will be assessing whether a proposed VNM Project can address a local electricity system need identified in an Integrated Regional Resource Plan (IRRP) or a Distribution System Plan from a host LDC that was filed with the OEB.

Determining local electricity system value is an important part of the RDGI program, as is the assessment of cost transfers between participants and non-participants and of understanding the ultimate impacts on different parties. In the absence of a pre-determined and prescriptive methodology for determining local value, the specific local value of the VNM Project will not be included in the evaluation at the application stage. The development of such a consistent methodology with strong input from the different LDCs participating as hosts is instead seen as one of the important learnings of the program. The VNM Call for Applications Guidelines allow for LDCs to include a description of their approach to this as part of the Application package to be considered toward project maturity (see Section 3.2 (b)(x)).

6. Regarding: Consumer Protection

Respondents generally expect existing protections to be sufficient and have requested that the RDGI Program not duplicate existing or proposed protections by other regulatory bodies.

IESO Response: *There are legislative and regulatory consumer protection requirements applicable to VNM Projects (see for example, the Energy Consumer Protection Act, 2010, S.O. 2010, c. 8, [Ontario Regulation 275/18 \(“Energy Consumer Protection Regulation”\)](#) and the OEB Electricity Retailer’s Licence). While the VNM Call for Applications will not specify additional consumer protection requirements, the IESO is interested in how proponents will seek to exceed the minimum legislative and regulatory thresholds, and successful Applicants will be required to report on this subject matter.*

7. Regarding: Other Public Funding

Respondents inquired about limits to other sources of public funding (municipal, provincial, federal).

IESO Response: *As per Section 2.2 (b) of the VNM Call for Applications Guidelines, Recipients will be eligible to apply for up to 50% of Estimated Eligible Project Capital Costs net of any other Public Funding committed to the project, adjusted for actual cost amounts at time of disbursement after achieving Commercial Operation.*

8. Regarding: Reporting requirements and application of learnings

Respondents inquired about reporting requirements and how these learnings would be used to inform policy and regulation.

IESO Response: *As per Section 2.4 of the VNM Call for Applications Guidelines, Recipients will be required to provide quarterly reports on progress prior to Commercial Operation, a comprehensive report on the development of the VNM Project promptly following reaching Commercial Operation, a comprehensive report on the operation of the VNM Project following the end of the Study Period, one*

additional comprehensive report during the Study Period at the request of the IESO with the option for a second, and to make available key personnel and customers for meetings and interviews during and immediately following the Study Period.

As per Section 2.5, Host LDC(s) will be required to provide quarterly reports on the modifications to its billing systems to accommodate the VNM Project, a comprehensive report on these modifications (with contributions from each Host LDC and overall analysis by the Lead LDC if applicable) promptly following reaching Commercial Operation, a comprehensive report on the settlement of the VNM Project following the end of the term of the Study Period, one additional comprehensive report during the Study Period at the request of the IESO with the option for a second, and make available key personnel and customers for meetings and interviews during and immediately following the Study Period.

The learnings provided by these reports will be consolidated by the IESO and are anticipated to be made publically available. These learnings are intended to inform future VNM policies and regulations as well as other IESO policies and processes including planning, operations, and Market Renewal.

9. Regarding: How VNM Credits will be applied

Respondents inquired about how VNM credits will be valued, accrued, allocated, and applied for VNM projects.

IESO Response: The determination of how the VNM credits will be valued, accrued, allocated, and applied is subject to the [Net Metering Regulation](#) and the agreements between LDC(s) and generators, and LDC(s), generators and customers referenced within.

10. Regarding: LDC Fees and Cost Recovery

Respondents had varied expectations of what fees may apply or how LDC costs could be recovered.

IESO Response: The determination of the rate base for costs, application of fees, and recovery of costs are governed by the Ontario Energy Board. The IESO defers to the OEB and the LDC(s), each within their respective domain, to determine appropriate cost recovery and fees in relation to VNM Projects.

Applications can include a request for reimbursement of Eligible LDC Capital Costs through the VNM Call for Applications on a per project basis, adjusted in the case of LDC(s) participating in multiple projects, to avoid duplicative funding as described in Section 2.3 of the VNM Call for Applications Guidelines.

11. Regarding: Data Collection and Utilization

Respondents suggested collecting broad sets of data from VNM Projects for the purposes of operations, planning, forecasting, visibility, locational value determination, and integrated system planning.

IESO Response: As part of the VNM Call for Applications, the Application form will request static facility data including location, capacity(ies), type(s), configuration(s), and connection point(s). Operational and financial information will be collected during the study period through reporting, to support the learnings expected to be generated through the VNM Call for Applications. It is not currently anticipated that metering, telemetry or other advanced data sets will be collected by the IESO as the LDC will be settling and interacting with these facilities; although the IESO is considering the future value of collecting these data sets. The IESO or its consultant may require specific detailed reports for the purpose of aggregation into its reports on a program-wide basis.

Suggested Potential Future RDGI Investigation Topics

- Non-Wires Alternatives
- Enhanced DER Aggregation Models
- Hosting capacity/interconnection processes
- Alternative metering/telemetry
- Alternative distribution services
- “Hybrid” Renewable Projects
- Micro-grid and Emergency, Stand-by, or Back-Up Generation
- DER Market Animation
- VNM Settlement Models
- Evaluate TOU NM benefit value/settlement
- Consider applicability of separate/sub rate NM customer class
- Define Strategically located and identify integration process into Regional Planning and Distribution Planning
- Determine incentive values and process to identify relevant zones
- Determine an incentive for Energy Storage
- Advanced storage solutions
- Blockchain technology applications
- Enhanced visibility, data aggregation and analytical tools
- Distribution connected DER visibility for LDCs
- Distribution connected DER operability (regional LDC dispatch)
- Common LDC Digital Platforms