Rule 024 stakeholder comment matrix

Comments from *(company/stakeholder name)*:	ENMAX Power Corporation	**Contact name *(for companies)*:**	Andrew Davison
Date [yyyy/mm/dd]:	2026/09/08	**Phone:**	
		Email:	[redacted]

Instructions:

1. Please download this document, save as "**Rule 024 matrix**" and fill out the demographic/contact information above.
2. Please review Bulletin 2026-10 and the blackline document for Rule 024: *Rules Respecting Micro-Generation.*
3. Please comment on the proposed information requirements below, including whether you agree that these information requirements should be included in an application under Section 4(3) or 4(3.1) of the *Micro-generation Regulation*. Please explain your position.
4. There are two open-ended questions included at the end of the document, including an opportunity to provide any additional information requirements that you believe should be included.
5. You can submit comments on as many or as few of the proposed changes as you wish. Blank boxes will be interpreted as neutral/favourable.
6. If a change from the blackline documents does not appear in the table below, it is considered administrative. You may provide comments on administrative changes in the general box at the end, if necessary.
7. While not all suggestions can be implemented, all relevant comments will be fully reviewed and considered.
8. Submit your response to engage@auc.ab.ca. In the email, please include the following subject line: **Rule 024 engagement**.

Rule 024 stakeholder comment matrix

Please review Sections 4(3) and 4(3.1) of the *Micro-generation Regulation:*

Connection and operation

4(3) Where in the opinion of the owner, concurred in by the Commission on application by the owner, the costs of connecting a particular micro-generation generating unit to the interconnected electric system are extraordinary, due to safety considerations, technological complexity or any other reason, the owner may require that the micro-generator directly reimburse the owner for the extraordinary portion of the costs.

(3.1) Where a micro-generator has changed the nameplate capacity of a micro-generation generating unit that is connected to the interconnected electric system and, in the opinion of the owner, concurred in by the Commission on application by the owner, the costs of maintaining the connection of the micro-generation generating unit to the interconnected electric system are extraordinary, due to safety considerations, technological complexity or any other reason, the owner may require that the micro-generator directly reimburse the owner for the extraordinary portion of the costs.

Rule 024 stakeholder comment matrix

Rule 024: New Section 6(2) **2) An application under Section 4(3) or 4(3.1) of the *Micro-generation Regulation* must include the following information requirements. If any of the below information is not available, the owner must explain why.**		
Category	**Proposed wording**	**Stakeholder comments**
Description of costs	6 (2) c) A description of each cost, or portion of each cost, necessary to connect the micro-generation generating unit to the interconnected electric system which is, in the opinion of the owner, extraordinary. (i) Include the item or category of items associated with each cost. The item or category of items may include, for example, specific equipment, equipment upgrades, studies, or protective devices. (ii) For any equipment upgrades, please indicate if existing equipment will be salvageable. If yes, please ensure the salvage value of the existing equipment is deducted from the extraordinary costs. If there is a reason why the salvage value should not be deducted from the extraordinary costs, please explain. (iii) For any included cost that does not have a finalized cost estimate, please indicate when a finalized cost estimate is expected.	Please note that ENMAX Power Corporation's (ENMAX Power or EPC) submissions (both this document and response to the AUC's questionnaire) are in relation to the interconnection of a microgeneration generating unit, and should not be confused with interconnection of load. The inclusion of section c)iii) appears to be a reasonable starting point for potential additional language in Rule 024. That said, further industry discussion is needed to determine what additional intermediary steps could be introduced prior to developing detailed or "finalized cost estimates", the definition of "extraordinary costs", and whether or not they should be codified into an AUC rule. **Depending on the microgeneration application, undertaking detailed analysis and developing cost estimates for connection can be time consuming, resource intensive and costly. ENMAX Power suggests the rule should not be prescriptive in requiring "finalized cost estimates" in a dispute application. Rather, the rule should allow flexibility via intermediate steps for the Distribution Facility Owners (DFOs) to verify with customers whether additional work should be pursued. As explained below, at any point during the connection process there could be a dispute about cost estimates or extraordinary costs, which could result in a dispute application without a "finalized cost estimate."** Prior to accurately identifying or scoping the connection timelines and efforts, ENMAX Power must first address any issues with the application such as oversizing the micro-generation generating unit or inverter, issues with past or future consumption or generation, and the technical specifications of the microgeneration generating unit. Once the application issues are resolved there are 3 main "categories" of microgeneration generating unit applications, each with very different connection timelines and efforts, including but not limited to extraordinary costs: - Less than 150kW with "simple" connection requirements (i.e. there is available hosting capacity at the connection point);

Rule 024 stakeholder comment matrix

		- Less than 150kW with insufficient hosting capacity, which requires distribution system studies and upgrades; and - Greater than 150kW, that are usually "complex" connections because of the size of the microgenerator and its impact on the distribution system, which requires distribution system studies and upgrades. System studies are expensive, require significant amounts of time, effort and costs (in some instances, ENMAX Power may require support from external consultants) to complete and are subject to available resources to perform the studies (i.e. conflicting priorities including resources focused on system operations and overall system planning). Therefore, if a study is required, ENMAX Power submits that a set deadline for studies is not feasible and that a flexible deadline, communicated to the customer, could work. System studies only provide information about the electrical interconnection and possible electrical-related upgrades for an interconnection, including but not limited to: increased capacity of various electrical components; safety and monitoring equipment for interconnection; and SCADA and communication requirements. For some larger applications, the operating procedures and technical specifications of the microgeneration generating unit may impact how the unit is connected to and operated with the distribution system. Without clear operating procedures or specifications from the applicant (which in some cases is difficult due to the long lead time required to procure some types of equipment such as synchronous generating units and switchgear), it may not be possible to identify what upgrades are required for connection, which could delay an effective system study and the interconnection process. In addition to upgrades identified by a system study, an interconnection in ENMAX Power's urban territory may also require complex and application-specific work that is time consuming and costly. Costs could be in the hundreds of thousands of dollars or higher, and developing reliable cost estimates could take six months or more. There are numerous urban site-specific factors that can significantly increase the complexity and cost of interconnection, which may include conflicts with existing utility infrastructure (natural gas, water, sewer, telecommunications, etc.), physical space limitations (buildings, roadways, and congested overhead or underground corridors), and safety requirements during construction, operations, maintenance, and public

		protection in a dense urban environment. The costs associated with such work include labour, equipment, services, materials, administration, project management, and design. Rather than investing considerable time and resources to quantify "finalized cost estimates" for connection, ENMAX Power's connection process, following receipt of a completed connection application, includes the stages outlined below (no prescribed timelines apply to these stages): - ENMAX Power performs an initial review or planning evaluation which identifies, at a very high level, estimated work for interconnection (not cost estimates), determination of number of required studies, and prepares an estimate of the costs for performing the study/additional scoping. Depending on the project, ENMAX Power may be able to prepare a very high-level list of possible work or cost estimates for interconnection, but since this is prior to performing any studies/additional scoping, this estimating is subject to considerable change. - ENMAX Power confirms whether the customer is prepared to proceed and will pay for the study/additional scoping. - If study/additional scoping is done, it should identify more detailed list of work (not cost estimates) required for connection, and ENMAX Power provides a more detailed estimate of the cost to prepare a more detailed design and cost estimate for connection. Again, ENMAX Power may be able to provide a very high-level list of possible work or cost estimates for interconnection, but without proper scoping of the work and costs, this estimating is subject to change. - ENMAX Power confirms whether the customer is prepared to proceed and will pay to prepare detailed design and to prepare more detailed cost estimates. - Once the detailed design and detailed cost estimates are ready (this may be what is referred to as the "finalized cost estimate"), ENMAX Power confirms whether the customer is prepared to proceed with interconnection and will pay the costs of the upgrades in order to connect. Of note, "finalized cost estimates" are just that – estimates – and depending on the level of detailed analysis, project complexity, and timing, they have an associated confidence range.

		- It is only after the work has been performed and the microgeneration generating unit is connected that ENMAX Power can provide the "finalized costs". At any point during this process the customer could halt the connection request and/or dispute an extraordinary cost, which could lead ENMAX Power to file a dispute application with the AUC. Upgrades are costly and time and resource consuming. There is no industry standard or definition of "extraordinary costs", and ENMAX Power believes industry consultation is required to clarify what are considered "extraordinary costs" and who bears those costs. ENMAX Power's Distributed Energy Resource Technical Interconnection Requirements (DERTIR) document[1] describes possible types of interconnection costs: • Studies (and re-studies for DER Facility changes) including system impact studies and interconnection studies as applicable • Intelligent Electronic Device • Telecommunications infrastructure, including in some cases SCADA systems • All rental fees • All project management and engineering required for implementation, including all permitting and licensing • Programming, commissioning, and testing • Ongoing maintenance and DER facility upgrades • Equipment setting and modifications • "Additional EPC equipment may be required to be installed in the DER facility, as determined by EPC on a case-by-case basis." • Examples identified in the DERTIR include: three-phase ganged-operation isolation switch; automated recloser capable of remote-controlled operation, tripping, and programming; reactive power technologies; upgrading existing transformers; new feeders; etc. For clarity, following the submission of a completed connection application, the customer may choose not to proceed at any point in the connection process, or ENMAX Power may file a dispute application. In either case, the customer remains

[1] Here on ENMAX's website: Standards and regulations

Rule 024 stakeholder comment matrix

		responsible for reimbursing ENMAX Power for the time, resources, and costs incurred up to that stage of the process.
Comparative analysis	6 (2) d) For each of the costs provided in (c), please provide a comparative analysis that explains why the owner considers these costs to be extraordinary, for example, due to safety considerations, technological complexity or any other reason. This analysis must include any supporting evidence that the owner considers relevant and may address the following: (i) The costs and types of costs to connect the average micro-generation generating unit; (ii) The costs and types of costs to connect the average micro-generation generating unit of the same size category (small <150 kW or large >150 kW); (iii) The costs and types of costs to connect comparable micro-generation generating units (i.e., similar nameplate capability, geographic area, safety, technical, or other reasons); (iv) Any specific characteristics of the micro-generation generating unit that contribute to the technological complexity of connecting the micro-generation generating unit to the interconnected electric system; (v) Any factors related to the connection of the micro-generation generating unit that may impact the safety and/or reliability of the interconnected electric system, along with any implemented or planned mitigation strategies; and (vi) Any other information the owner considers relevant to the Commission's consideration.	Due to the complex nature of interconnecting in an urban environment where each interconnection request is unique (as explained in more detail above), comparative analysis between connection costs for similar micro-generating units would likely not be possible since they may be in vastly different environments, each associated with different costs. Likewise, costs for interconnection requests of similar complexity also may not be possible because a similarly complex connection request may be materially different and not a meaningful comparator. ENMAX Power treats generation, including microgeneration, similar to a load with "first-come, first-served" lens. This requires planning evaluations at every new project commencement. If the planning evaluation reveals the need for upgrades in order to connect the microgenerator, and the customer wishes to continue with the interconnection, then the customer wishing to interconnect the microgenerator would pay for the upgrades. If at any point the customer decides not to proceed, the customer would still be responsible for the costs incurred by ENMAX Power including the system studies, detailed design work and estimations, etcetera.
General		
Section 6(1) of Rule 024 states that "the owner shall file a completed notice of dispute…within 14 days from the date in which the owner finalizes its cost estimate". The Commission is aware that the cost estimates for each item or category of items		**Stakeholder comments**: As explained above, "finalized cost estimates" in an urban environment are complex, expensive to prepare, and time consuming, sometimes taking six months or more.

associated with the connection of a micro-generation generating unit may be finalized at different times in the connection process. Please comment on the optimal timing for an owner to submit an application under Section 4(3) or 4(3.1) of the *Micro-generation Regulation*.	ENMAX Power submits that the optimal timing for an owner to submit an application under Section 4(3) or 4(3.1) (Dispute Application) could be a two-option process: • If the application is "simple" (i.e. small micro-generation generating unit and no hosting capacity concerns), then the owner could meet the 14-day timeline that exists now. • However, if the application is "complex", the owner would submit the Dispute Application within 14 days after the customer disputes an extraordinary cost (ENMAX Power provides cost estimates and gives customers 90 days to respond). That said, a Dispute Application may not include all cost estimates, but it could provide reasonable estimates available at the time of the type of work or requirements in order for the interconnection to proceed. Specifically, when there is an impasse or disagreement at any point during the interconnection process described in ENMAX Power's comments above (see ENMAX Power's comments regarding in the Description of Costs section of this stakeholder comment matrix), the timeline should begin and the DFO has 14-days to submit the dispute application with the information available at that time.
Please provide any additional information requirements that should be included in an application under Section 4(3) or 4(3.1) of the *Micro-generation Regulation*. Please explain your position.	**Micro-Generation Qualifications materials are in Form B, while Extraordinary Costs materials are proposed in Rule 024** Form B – Notice of Dispute states in part that the form is for both "dispute with respect to whether a customer's proposed micro-generation generating unit **qualifies as a micro-generation generating unit or on the question of extraordinary costs**." (emphasis added). Form B has a section titled "If notice of dispute is related to Section 2(2) or 2.1(2) of the *Micro-Generation Regulation*", which relate to qualification as a micro-generation generating unit, and lists several (at least eight) questions for the owner to provide information. Conversely, with respect to extraordinary costs (the second reason an owner would complete Form B), there is nothing in Form B and instead Rule 024 is being revised to include Section 6(2) which sets out several (approximately nine) questions to which the owner must provide responses. Simply put, reasons for disputes relating to qualifying as a micro-generation generating unit are in Form B, while reasons for disputes relating to extraordinary costs are proposed in AUC Rule 024.

Rule 024 stakeholder comment matrix

	It is unclear to ENMAX Power that there is any difference or distinction between requirements set out in Form B compared to requirements set out in AUC Rule 024. If the Commission intends there to be differences or distinctions, could the Commission please clarify what those are? Alternatively, if there is no difference or distinction, it would be consistent and avoid unnecessary confusion if questions related to both "qualifications" and "extraordinary costs" are in the same format – either both in Form B, or both in Rule 024.