

August 27, 2024

Alberta Utilities Commission
600 3 Ave SW Tower 1400
Calgary, AB T2P 0G5

Submitted via e-filing System

Attention: Kimberly Macnab, Executive Director, Facilities

Re: Saamis Solar Park Power Plant
Proposal pursuant to Section 95 of the *Electric Utilities Act* to transfer ownership

The City of Medicine Hat makes this application to the Alberta Utilities Commission (AUC) pursuant to sections 11, 19 and 23 of the *Hydro and Electric Energy Act*¹ (“HEEA”) and section 95 of the *Electric Utilities Act*² (“EUA”) for approval to transfer the following (collectively, the “AUC Approvals”):

- Power Plant Approval 27788-D02-2024; and
- Substation Permit and Licence 27788-D03-2024.

Transfer Approval

Saamis Solar Park Limited (“Saamis”) is the current holder of the AUC Approvals for the construction and operation of the 325 MW solar Power Plant and the New Grian 1056S Substation (the “Project”). Enclosed as **Attachment 1** to this application is a completed Electricity Facility Approval Transfer Application on behalf of the City and Saamis.

The City and Saamis are parties to an Asset Purchase Agreement pursuant to which the City intends to acquire the Project. The closing of the acquisition of the Project is anticipated to occur prior to the end of 2024 (“Closing Date”). As a condition of closing, the AUC Approvals must be transferred to the City, therefore the effective date of the transfer is immediate. The City will advise the AUC of the exact Closing Date once the date is finalized.

The City acknowledges the conditions contained within the AUC Approvals and acknowledges that it will assume the obligations therein. In addition, the City is a municipal corporation and subject to obtaining approval pursuant to section 95 of the EUA, is eligible to hold the AUC Approvals pursuant to section 23(h) of HEEA.

¹ RSA 2000, c H-16.

² SA 2003, c E-5.1.

Section 95 Approval

In addition, the City is also seeking approval pursuant to section 95 of the EUA to acquire the AUC Approvals and to hold a 100% interest in the Project. Section 95 of the EUA sets out the permissible interests in generating units that a municipality may hold. Subsections 4, 5 and 6 state:

(4) The City of Medicine Hat or a subsidiary of the City may hold an interest in a generating unit or energy storage resource if the generating capacity of that unit or the storage capacity of the storage resource and all other generating units and energy storage resources in which the City or a subsidiary of the City has an interest does not exceed the capacity that is needed to reliably meet the requirements of customers in the service area of the City.

(5) The Commission must determine whether

(a) a proposal by the City of Medicine Hat or a subsidiary of the City to hold an interest in a generating unit, or

(b) an interest in a generating unit that is held by the City of Medicine Hat or a subsidiary of the City is in accordance with subsection (4).

(6) Before making a determination under subsection (5), the Commission must obtain an independent assessment about whether the proposal to hold an interest in a generating unit or whether the interest in a generating unit is in accordance with subsection (4).

Therefore, the City respectfully requests that the AUC obtain an independent assessment with respect to the City's proposal to acquire the Project. In support of this request, **Attachment 2** to this application provides further information to support a finding that the City's acquisition of the Project satisfied Section 95 of the EUA. Attachment 2 also provides information with respect to the capacity, need and reliability requirements for customers in the service area of the City.

In addition to meeting the capacity and reliability requirements of the City's customers, the diversification of the City's generation to include renewable electricity is one of the City's strategic priorities, driven by a need to address current and pending decarbonization policies within the electricity sector. For example, City Council's strategic priority 6.5 is to implement the *City of Medicine Hat's Environmental Framework* which was adopted in June of 2024. Goal 7 of this Framework is to increase renewable source of electricity to the City of Medicine Hat grid.³

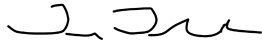
In order to better match the generation from the Project with load growth, the City is exploring options to construct the Project in two or more phases, with the first phase preliminarily being set at no more than 75MWac. The changes are anticipated to remain within the outlined allowances within the AUC Approvals and will be reflected in the final project update which must be filed with the AUC at least 90 days prior to the start of construction. The City has contracted Kilo Power to

³[Environmental Framework | Shape Your City Medicine Hat.](#)

prepare a preliminary site layout for the purposes of this application to ensure feasibility. Design for the remaining 250MW will be completed at a later date. If an amending application is required, the City will submit the appropriate application once more details are known.

We trust the enclosed information is sufficient to complete the transfer of ownership of the Project to the City, however, should you have any questions or concerns, please contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Tuchscherer', with a stylized flourish at the end.

Travis Tuchscherer CFA
Director Energy Marketing and Business Analysis
Office: 403-525-8601
Email: TRATUC@medicinehat.ca

General information		
Application: 29273-A001	Registered: August 27, 2024	Status: Registered
The applicant certifies that the information provided here and in all supporting documentation is correct and in accordance with all regulatory requirements or as directed by the Alberta Utilities Commission.		
Applicant information		
Primary applicant		
Applicant name:	City Of Medicine Hat	
Primary contact:	Travis Tuchscherer	
Email:	tratuc@medicinehat.ca	
Telephone:	(403) 525-8601	
Representative		
Representative name:	SABR Energy Consulting Inc.	
Primary contact:	Samantha Brown	
Email:	sbrown@sabreenergyconsulting.com	
Telephone:	(587) 434-7547	
Application information		
Application description:	City of Medicine Hat Transfer of Ownership & Section 95 Application	
Functional group:	Electric facilities	
Application category:	Power generation	
Application type:	Power plant ownership change	
Application type description:	Applications for approval to sell, transfer or otherwise change the ownership of power plant assets.	
Contact information for the applicant representative to be included on the AUC notice:		
	Name:	Travis Tuchscherer
	Phone number:	(403) 525-8601
	Email address:	TRATUC@medicinehat.ca
Applicant's reference number:		
Legislation		
Legislation:	ELECTRIC UTILITIES ACT (Ch.E-5.1, 2003)	
Legislation section:	95	
Legislation:	HYDRO AND ELECTRIC ENERGY ACT (Ch.H-16, RSA 2000)	
Legislation section:	11, 19, 23	
AUC rule		
AUC rule:	Rule 007 Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines	
Rule section:	https://www.auc.ab.ca/rules/rule007/	

Quadrant(s)	
Quadrant:	South

Date: July 19, 2024

Applicant's company name : City of Medicine Hat

Information requirements

Ownership transfer application requirement (AT1)

State the approvals or licences to be transferred, including connection orders, if applicable.

Power Plant Approval 27788-D02-2024
Substation Permit and Licence 27788-D03-2024

Ownership transfer application requirement (AT2)

Provide a list of existing approvals for facilities directly affected by the application.

N/A

Ownership transfer application requirement (AT3)

Provide a list of companies that may be affected by the transfer and confirm that these companies have no concerns regarding the application. This must include the transmission facility owner (TFO) or distribution facility owner that the facilities are connected to.

AltaLink Management Ltd. is the TFO, and they have no concerns regarding the application.

Viterra Canada Inc. is the landowner and they have no concerns regarding this application.

Ownership transfer application requirement (AT4)

Provide the effective date of the transfer.

July 19, 2024

Ownership transfer application requirement (AT5)

Provide details of the current and proposed ownership structure, including the names of all companies having an ownership interest and their ownership share, and if applicable, the name of the operator of the facilities that is seeking to acquire the approval, permit or licence. Confirm that the proposed approval holder is a qualified owner.

The City of Medicine Hat will be the 100% owner of the Project and is a qualified owner as a "municipal corporation".

Ownership transfer application requirement (AT6)

If the proposed approval holder is a municipality or a subsidiary of a municipality, provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*.

[Please submit along with your application].

Ownership transfer application requirement (AT7)

For a transfer of an operating licence from a market participant to a TFO the application shall include:

- Confirmation by the ISO that there has been satisfactory completion of all activities and requirements as required by the ISO connection process.
- Confirmation by the TFO of its readiness to accept the facilities.
- The date the transfer is to take effect.

[Please submit along with your application].

When complete, save a copy of this form as a PDF file and submit the file to the AUC through the eFiling System.

Attachment 2: Section 95 Supporting Information for 2024 Saamis Solar Park Application

Table 1 shows the relationship between the actual generating capability of the generation facility and the forecasted customer load within the City of Medicine Hat's (the City) service area. The City's customer load peak occurs in the summer due to the high air conditioning load experienced in this part of the province. The peak load is coincident with the period when the generation output of the installed gas turbines are reduced due to high ambient temperatures. The summer peak demand is based on forecasts produced by the City's electrical distribution system.

The City uses the "Loss of the Largest Unit Method" as its generating reliability criteria in determining the need for new electric generating capacity on its system. This 'n-1' approach recognizes the importance of access to local firm supply to reliably meet the City's local peak load, with full discount of any supply that is contracted from third parties and/or is not firm-capable. This approach has been recognized and supported by the AUC as the appropriate methodology in previous City supply applications. Table 1 shows that the City expects to have a gap in 2025 of 8.1 MW and if the peak load continues to grow as forecast that gap will increase.

This proposal is for the City to add up to a 75 MW capacity solar farm to its electricity fleet of assets, in a first phase of a larger project. The tentative plan is to achieve final investment decision for this first phase in Q4 2024, start construction of this solar farm in 2025 with commissioning in February 2027 (subject to further project amendments and approvals). The City also has a contract for wind energy with the Box Springs Wind Corporation.

Pursuing clean energy developments, such as wind and solar, is a prudent diversification measure to manage incoming (decarbonization) regulatory risk, and to satisfy growing customer interest in being served by green energy. Without this solar asset, the City owned generation fleet is 100% thermal fired, leaving the City fully exposed to increasing carbon compliance cost (under Alberta's *Technology Innovation and Emissions Reduction Regulation*) and at significant risk of facing premature shutdown should the Federal *Clean Electricity Regulations* come into force without sufficient emissions flexibility. As a jurisdiction that is dependent on local supply to serve local load, entry into clean energy is an essential step towards longer term decarbonization and regulatory compliance. On an increasing basis,

access to green energy is also important for customer retention and attraction. Recognizing the relatively low capacity factors of intermittent clean energy, however, larger capacity levels are required to satisfy this demand. Further, introduction of clean energy at this size will allow for important learnings by the City for how to manage a material level of intermittent energy on its local electrical system before pursuing further scalable growth in this area. The City’s objective is to ensure electricity supply that is reliable, competitive (with the rest of the Province), and compliant. Introducing clean energy while we have the benefit of firm thermal supply is a critical first step in achieving that objective now and into the future.

While the City feels that this new solar will assist in shaving the summer peak load in certain conditions, renewable energy is not firm energy since wind and solar energy is intermittent and cannot produce ‘on demand’. System reliability requires that there be sufficient firm energy, typically thermal or hydro, to ensure the "lights stay on". The previous Section 95 assessments¹ for approval of the Box Springs wind farm, which was transferred to the Box Springs Wind Corporation, and the solar thermal concentrator demonstration project confirmed that intermittent energy should not be considered in determining the requirements for reliability, and therefore, should not factor into the n-1 calculation.

Table 1 Comparison of Generation Capacity and Forecast Peak Demand Year

	Year	Summer Firm Capacity (MW)	Loss of Largest Generating Unit (MW)	Firm Capacity (MW)	Peak Demand (MW)	Reserve Capacity (MW)	
Status Quo	2016	203.4	59.5	143.9	164.5	-20.6	Actual
Addition of LM 6000	2017	243	59.5	183.5	173.1	10.4	Actual
Status Quo	2018	243	59.5	183.5	214.5	-31.0	Actual
Status Quo	2019	243	59.5	183.5	218.1	-34.6	Actual
Status Quo	2020	243	59.5	183.5	208.7	-25.2	Actual
Status Quo	2021	243	59.5	183.5	229.4	-45.9	Actual
Addition of LM 6000	2022	286.4	59.5	226.9	210.6	16.4	Actual
Status Quo	2023	286.4	59.5	226.9	221.1	5.8	Actual
Status Quo	2024	286.4	59.5	226.9	229.4	-2.5	Forecast
Status Quo	2025	286.4	59.5	226.9	235.0	-8.1	Forecast

The City, in order to “reliably meet the requirements of customers in the service area of the City”, plans its generating reserve to be capable of supplying its peak customer load during an outage of its largest

¹ See AUC Proceeding 249 (Application 1604838), Independent Assessment by Mr. Jim Wilson conducted for the AUC.

unit. As the existing gas turbines operate in combined cycle, the failure of one gas turbine has a cumulative effect on the output of the steam turbines, as steam generation is also lost when the combustion turbines are not operated. The largest generation unit is CT14 or CT15. Shutdown of this unit would represent a loss of generating capacity of 59.5 MW.

The total summer capacity shown on Table 1 reflects the power generated in each combustion turbine, as well as the power that can be generated from the steam production with auxiliary duct firing.

Table 1 indicates that the City has invested in assets to ensure that it can supply its firm customer load during peak periods with single unit contingency planning. The City has managed this requirement while complying with the requirements of the Electrical Utilities Act.

Note that the City has a contract with the cogeneration facility at Cancarb that has been amended for 18.5MW. While the contract terms between the City and the Cancarb cogeneration facility are confidential, the City can advise that it has no ownership interest in the Cancarb generation or control over failure of the facility to provide physical delivery. If delivery shortfalls occur, contract provisions are settled financially. For that reason, and consistent with past supply applications to the AUC (as noted above), the City plans and operates its system to rely on generating units owned by the City (with full discount of any third party supplied generation). This is confirmed in *City of Medicine Hat Payment in Lieu of Tax Regulation* which states for the purpose of calculating the payment of lieu of taxes:

(b) “available unit” means, in each hour, a generating unit owned by the City of Medicine Hat that is physically capable of generating electric energy in that hour

The table below lists the generating units owned and operated by the City providing firm energy:

Table 2. Generating units owned and operated by the City providing Firm Energy		
Unit number	Capacity (MW)	In Service Date
Unit 10 (LM2500+)	27.2	2006
Unit 11 (LM2500+)	27.2	2006
Unit 12 (STG)	33	1996
Unit 3R (STG)	33	1998
Unit 14 (LM 6000)	41.5	2003
Unit 15 (LM 6000)	41.5	2009
Unit 16 (LM 6000)	41.5	2017
Unit 17 (LM 6000)	41.5	2022
Total Firm Capacity	286.4	

*The capacity for Unit 16 has been amended from the previous section 95 application after reviewing actual operating performance.

Finally, there can be many benefits to the City when adding green energy to the generation portfolio including:

- **Reduction of Greenhouse Gas Emissions:** Green energy sources, such as wind, solar, and hydro, produce little to no greenhouse gases, helping to combat climate change. The City faces ambitious policy requirements to reduce carbon emissions, and increasing the use of renewable energy will assist in complying with current or pending provincial and federal regulations.
- **Decrease in Air and Water Pollution:** Renewable energy generation produces fewer pollutants compared to fossil fuels, leading to cleaner air and water.
- **Long-term Cost Savings:** While the initial investment in renewable energy infrastructure can be high, operational costs are typically lower, and renewables can provide significant cost savings for consumers over time.
- **Community Resilience:** Renewable energy systems can be more resilient to natural disasters and other disruptions, facilitating a stable energy supply during emergencies.
- **Attracting Investment:** Cities that prioritize green energy can attract investments and grants from governments, international organizations, and private entities interested in supporting sustainable development.
- **Fostering Innovation:** Investment in green energy can spur technological innovation and position a city as a leader in the renewable energy sector.