New Renewable Energy Opportunities in Alberta and Saskatchewan

Key Challenges and Next Steps

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All eyes are on Canada’s Western provinces as they prepare competitive bids to meet their new renewable energy targets for 2030. Under its Climate Leadership Plan, Alberta has set a target of 30% renewables generation for the province over the next 14 years while Saskatchewan is aiming for 50% over the same period. Alberta’s system operator, AESO, and Saskatchewan’s crown-owned utility, SaskPower, are now developing procurement plans for new renewables generation and are expected to launch competitive bids this year.

**Procurement Programs Imminent**

Under the leadership of Mike Law, Vice-President of Market Services, AESO has already started engaging the developer and investment communities, along with other interested parties, to seek their input on the renewables procurement plan. The system operator has been tasked to provide draft recommendations to the Government in May. After a lengthy engagement process, the first competitive bid is expected to open towards the end of this year.

“As part of this process, we are conducting a comprehensive jurisdiction review to ensure lessons learned from programs elsewhere are considered in our program design,” reports James E. Allen, Assistant Deputy Minister, Electricity and Sustainable Energy Division, Government of Alberta.

The Alberta Electric System Operator has launched a questionnaire on their website which is open until March 24, 2016 to provide input into the process. “This questionnaire is already generating a lot of interest and is just the first phase of our planned engagement,” says Allen. Information can be found at www.aeso.ca/rep/

SaskPower is also moving quickly and thoroughly in developing its competitive bid. “We are considering all available options to make sure we have sustainable, affordable power for our customers and will have procurements for both wind and solar in the later part of 2016,” comments Guy Bruce, Vice-President, Planning, Environment and Sustainable Development, SaskPower.

Currently, around 25% of Saskatchewan’s generation capacity comes from renewable sources – 20% from hydro and 5% or 220 megawatts (MW) from wind. Three new wind power projects already approved or in development will add another 207 MW of renewable generation by 2020. The short-term goal, as Bruce explains, is to add another 300 MW of wind by 2024. To meet the overall 50% target, SaskPower will likely develop up to 1,600 MW of new wind generation between 2019 and 2030.
Merchant Market Complexity

While SaskPower’s competitive bid is likely more imminent, the Alberta market represents a larger, albeit more complex, business opportunity for renewables developers and lenders. The Alberta Government plans to replace two thirds of coal-generated electricity with approximately 4,200 MW of renewables generation which will require around C$30–C$50 billion in private investment.

The province’s merchant market makes project development and financing much more complex. “The biggest issue we will have as lenders is the expected stability of the Alberta market,” comments Robert Nicholson, Managing Director, Energy and Power Group, RBC Capital Markets, one of the leading debt providers to the renewables sector.

As Nicholson explains, in a merchant market, lenders take on both volume and price risk unlike under contracted arrangements where lenders take on volume risk but have price certainty. As the plans for Alberta’s procurement evolve, lenders will be measuring market stability in a number of ways including pricing, market rules, market participants, and contract-type, Nicholson adds.

Expected growth in energy demand is another key metric for the renewables sector in gauging new project opportunities in Alberta. “When you look back on Ontario, you see that there was a certain projection of what demand was going to be and that was how the feed-in-tariff program was developed – with a certain number of GW per year to replace coal and fulfill the growth in demand,” recalls Martin Pochtaruk, President of Heliene, a leading Ontario-based solar panel manufacturer, and a Partner with Isla Power. “The trouble was, demand never grew.” As such, understanding the demand evolution in Alberta is critical to determining the price of electricity and market opportunity going forward, adds Pochtaruk.

A REC-Auction Mechanism

Making a competitive procurement work in a merchant market is indeed a challenge. “What’s happening is the Government is trying to provide an incentive to the industry but also minimize the exposure risk of the province by minimizing out of market payments to generators,” explains David Timm, Vice President,
Key Facts on Saskatchewan’s Renewables Strategy

- **Provincial Target:** 50% Renewables by 2030
- **Administrator:** SaskPower
- **Market Size:** Short-term goal is to add 300 MW by 2024
- **Timeline:** Competitive bids for wind and solar expected in 2016

Source: Canadian Clean Energy Conferences

Sussex Strategy Group, a leading advisor to many of the wind and solar developers actively exploring the Alberta market.

What’s currently anticipated is that AESO will launch a Renewable Energy Credit (REC) auction whereby the system operator agrees to purchase RECs from project proponents at $35/MWh. Generally speaking, reports Timm, this would cover only a percentage of the necessary revenue requirements for renewable energy projects.

While US markets have had success with financing renewables power purchase agreements through Renewable Energy Certificates (RECs), the Canadian market doesn’t currently allow companies to take advantage of tax credits in the same way. Therefore, for developers not financing on-balance sheet, new projects will call for some creative finance solutions.

Another key development is the province’s carbon pricing regime which may provide the revenue for the RECs. Starting next year, a carbon price will be applied across all sectors starting at $20 per tonne and moving to $30 per tonne in 2018. Finance experts say that if this is the chosen revenue pool, they will be analyzing the credit worthiness of the carbon-credit buyers and the stability of the carbon pricing system when considering investment in new projects.

Greenfield Wind Opportunities

Renewables developers are, of course, very eager to understand the details of Alberta’s procurement plan. “At the moment we are waiting to find out what the regulations and policy will be,” says Stewart Duncan, Chief Executive Officer & Director of the Alberta Wind Energy Corporation. The company is currently developing two 300 MW wind farms as well as some smaller projects in Alberta.

As Duncan points, one of his concerns is the long lead time for wind project approval. “Our feeling is that in starting these projects now, it will be 2018 or 2019 by the time you would be in a position to build as you have to have two years of environmental studies and go through the AUC (Alberta Utilities Commission) approvals,” he explains.

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The Saskatchewan market is less complex in terms of the market and finance structures with SaskPower acting as the contract offtaker but competition may be tight. Similar to Nova Scotia’s 2012 competitive bid for around 200 MW of wind, there could be a many developers competing for a relatively small number of contracts.

SaskPower is also predicting steady growth in energy demand, reports Bruce. “We’ve seen a 16% load growth in the past five years, and are expecting an additional 11.5% load growth over the next five years,” he reports.
Large-Scale Solar Prospects?

According to SaskPower, it is planning to move forward with utility-scale solar power generation, which would include at least 60 MW of solar, with a competitive procurement beginning in 2016. In an effort to expand the number of customers generating solar power, the corporation is also reviewing its Net Metering program, which offers customers generating up to 100 kilowatts of renewable energy technology the opportunity to get credit for the unused portion of their excess electricity.

For its part, the Alberta Government has not made a decision in terms of technology types under the competitive bid. However, as Assistant Deputy Minster Allen points, the Expert Advisory Panel that informed Alberta’s Climate Leadership Plan specifically recommended that the renewables support program be technology neutral, allowing the market to decide the most cost-effective approach to deploying renewables.

“That is a recommendation that will certainly inform our program development, although decisions have not yet been made,” he adds. “Solar and other technologies beyond wind may indeed be an important part of Alberta’s renewable mix in the future.”

Key Questions for Developers and Lenders on a Competitive Bid in a Merchant Market

Canadian Clean Energy Conferences asked 20 renewables experts from the legal, finance, developer and supplier sectors what the key questions are for developers and lenders looking to participate in a competitive bid in Alberta’s merchant market. Here is a summary of what the industry said:

- What is the expectation in terms of the bidding process?
- How will the program allow for price certainty and long-term financing securitization?
- What will the financial incentive be for new renewables generation?
- If it is revenue from carbon pricing, what is the credit-worthiness of the carbon offtaker and the stability of pricing regime?
- Will the competitive bid allow for a good mix of players to participate – i.e. not just those who can finance projects on balance-sheet?
- Aside from financing, are there other expected challenges around transmission access and permitting that need to be understood to inform business planning?
- What is the political risk – i.e. if there is a change in government and the revenue for these projects is tied to carbon pricing policy?

Source: Canadian Clean Energy Conferences

Editor’s note: All of the interviewees for this article will be participating in the Alberta and Saskatchewan Renewable Energy Finance Summit on June 2-3 with key government, finance, developer and supplier participants.

To Learn More about new renewables opportunities in Alberta and Saskatchewan and receive regular market updates, visit: www.albertasask.canadianclean.com