MINUTES
Trustee Meeting – Strategic Priorities Fund
12:00 pm April 7, 2022
SSID storage shed

Present:
Trustee Chair Bryan Miles, Trustee John Revitt, Trustee Emer Dubois, administrator Janine Reimer, and consultant Neil McLean.

1. **Introduction** ....B.Miles
The Chair gave an overview of the purpose of the meeting, being that trustees would consider applying for a grant from the qathet Regional District to fund a solar system.

1. **Summary of the grant offering** .... J.Reimer
The administrator said she had spoken with qathet Regional District Manager of Financial Services Linda Greenan regarding grant funds that were available at 100 percent contribution from the federal Strategic Priorities Fund, without requiring in-kind contribution from SSID, and not requiring that SSID be absorbed into the qRD if receiving the grant. The administrator said that the types of projects for which SSID would be eligible were "innovative" and "clean environment."

3. **Summary of the grant requirements**... J.Reimer
The administrator said the grant required answering application questions, and submitting the application to the qRD by April 30.

4. **Considerations for SSID solar system**... N.McLean
Electrical consultant Neil McLean had done preliminary calculations of current diesel energy powering the pumps, and the solar equipment required to do the same. He clarified that diesel generator power would still be needed on dark days, notably in the winter months. He said his calculations had incorporated materials and labour.

Neil said that a solar installation needed to provide 100 percent of SSID's power use would be a very large, but that a smaller system of 24 panels would provide more than 60 percent of power requirements in the peak month of July, which currently requires about 8 hours of generator run-time, or 40kWh for the 5HP pumps. August requires about 5-6 hours. The battery installment would be a 48-volt system costing less than $8000, for 2 lithium batteries, with a longer life than lead-acid batteries, and chargeable/dischargeable to full capacity.

Neil said some alder trees would have to be removed. There was discussion of the surrounding alders in regard to their health, appeal, danger, and exchange for solar energy (carbon offset).

Neil said that the solar panels could be mounted on the storage shed roof if the roof were strengthened, and would require that the area be longer than the roof is now by 6 feet.

It was discussed that some aspects of the new structure might or might not be covered by the grant fund, so if necessary would be covered by SSID reserves.

Neil summarized his rough budget as batteries $5,000, inverter $5,000, controllers $1,000 each x 2. All components including the solar panels and labour would be about $45,000. Neil said the interior components would take up a small amount of interior space, which would need to be insulated and vapor-barriered.

There was discussion as to how the solar system would engage with the existing Thomson panel. Neil said there wouldn't have to be any significant changes. The inverter would produce 3-phase output to pumps as needed.

It was discussed that perhaps there should be consideration of over-subscribing the solar power, for unforeseen additional power needs.

There was also suggestion that the tank farm be the solar location, rather than the well lot, due to the amount of sunlight at the tank farm. Neil said that the infrastructure costs would be higher, and the buried wiring from that lot to the well lot would be vulnerable to damage.

5.   **Considerations for solar system housing** ....B.Miles
Chair Miles said SSID would need to build a structure to house the solar system equipment and support the solar panels. He had spoken with Makana of Matt How Construction regarding construction budgeting on Savary. Makana had said that typically the budget figure was $150-$175 per square foot, to lock-up. As an example, a 720 sq.ft. building would range $108,000 - $126,000. When added to the $45,000 solar equipment estimate, the project would be around $150,000-$170,000.

It was suggested that while upgrading the storage shed to support the panels, the building could be extended to house generator-2 in a separate room. It was also noted that the current building is 50 years old, with structural deficiencies. The upgrade costs to make the shed suitable for a solar system might even be more than constructing a new building. It would also be advisable to get the electronics out of the aging pumphouse, and into a new structure. Chair Miles said he could ask Matt How Construction to provide an estimate, with the roof size for solar panels being the main consideration. Neil added that available sunlight must be a consideration when locating the new building. .... Chair Miles to ask for construction estimate

There was discussion of the optimum incline of the roof for capturing sunlight. Neil said he would supply calculations of roof pitch affect on solar gain. He said that cloudy days in winter will provide zero power, so the generators will have to run during the 4 darkest months. Even so, SSID's savings per year with solar would be up to $5,000, if diesel remains at $2 per litre.

Additional potential costs were mentioned, including an electrical budget for the structure, a bathroom, a meeting space, and enough room to house all the current equipment and supplies in the storage shed, assuming the old storage shed would be deconstructed.

Neil suggested that the per-square-foot rate might be closer to $500 after all things considered, such as engineering or design fees, as examples.

There was discussion of assigning electricians for the work. Neil said SSID should assemble a comprehensive list of what we want, so that we can engage the appropriate person(s).

6.   Related expenses .... J.Reimer
The administrator said that aside from tree removal costs, and the Regional District's administration fee, she didn't see any other costs yet. Chair Miles suggested that the group think what other costs might be applicable, and email those thoughts to the administrator.
.... All to consider additional costs

7.   Division of labour .... J.Reimer
The administrator said she would go through the questions of the grant application, and suggest to the trustees and Neil which questions they might answer, so that together the group would get the application completed by deadline.

It was discussed that the solar project should be incorporated into the asset management plan to show its viability. .... administrator to provide asset management scenario for solar system

8.   Motions
8(a) Motion
THAT SSID pursue a Strategic Priorities Fund grant for the purpose of procuring a solar system
.... Moved E.Dubois, 2nd J.Revitt. Carried.

8(b) Motion
THAT the Trustees engage Neil McLean to provide budget figures for the components and labour of a solar system appropriate to SSID's energy needs, for consideration at the Trustee Meeting 10am Mon Apr 25. .... Moved E.Dubois, 2nd J.Revitt. Carried.

9.   Site review outside... B.Miles
Chair Miles showed the group the space possibly suitable to a new structure that would provide support to the solar panels. Discussion.

10.   Next Meetings................. Admin/Finance on April 19; Operations on April 21; Finance on April 25.

11.   Adjournment.. Moved B.Miles.
1:45 pm.