TO:	Planning & Development Committee
FROM:	B. Newell, Chief Administrative Officer
DATE:	March 18, 2021
RE:	Zoning Bylaw Amendment – Electoral Area "D", "E", "F" & "I" Regulation of "Solar Energy Systems"

Administrative Recommendation:

THAT, prior to consideration of first reading, the Regional District of Okanagan-Similkameen Solar Energy System Amendment Bylaw No. 2911, be amended in order to incorporate the following:

- the minimum parcel area requirement for a ground mounted systems be revised from 1.0 ha to 0.25 ha; and
- that ground mounted systems less than 1.2 meters in height be exempted from interior side, exterior side and rear setback requirements.

Purpose:

The purpose of this report is to seek direction from the Board regarding public feedback received in relation to the introduction of regulations governing the placement of solar energy systems within Electoral Area "D", "E", "F" & "I".

Background:

At its meeting of May 21, 2020, a Motion was carried requesting staff to "bring forward options for zoning regulations to govern the placement of solar energy devices (e.g. solar panels, solar trees, etc.)."

It is understood that this motion was in response to a number of solar energy devices being erected in Electoral Area "E", and that have raised concerns from the neighbouring property owners regarding visual impressions (blocked views, glare, shadowing etc.).

At its meeting of October 1, 2020, the Planning and Development (P&D) Committee of the Board resolved to initiate Amendment Bylaw No. 2911, in order to introduce zoning regulations for solar energy systems in Electoral Areas "D", "E", "F", & "I".

Public Consultation:

As part of the initiation of Amendment Bylaw No. 2911, the following consultation was undertaken:

- referral to the applicable Electoral Area Advisory Planning Commissions (APCs);
- notification of external agencies (October, 2020);
- documentation added to Regional District web-page (October, 2020);
- notification posted to the Regional District's Facebook page (November, 2020); and

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• notification on CivicReady to approximately 696 persons (February 19, 2021).

In response to this notification, the following comments were received:

- 6 responses were received from the public (see summary at Attachment No. 2);
- 0 responses were received from external agencies; and
- An electronic Public Information Meeting (PIM) was held on March 3, 2021, and was attended by approximately 12 members of the public.

The proposed amendments were considered by the applicable Electoral Area APCs between November and December of 2020, with the following recommendations put forward for Board consideration:

Electoral Area "D": that the proposed amendments be approved, subject to the following:

- to reduce the parcel size requirement to 0.25 ha for ground mounted systems; and
- to relax the setback regulations for ground mounted systems less than 1.5 metres (5 feet) in height.

Electoral Area "E": that the proposed amendments be approved.

Electoral Area "F": that the proposed amendments be approved.

Electoral Area "I": that the proposed amendments be approved.

Analysis:

Based upon the received feedback, Administration is seeking direction from the Board on a number of proposed regulations, each of which will be addressed below:

Minimum Parcel Size Requirement:

While Draft Amendment Bylaw No. 2911 requires a minimum parcel size of 1.0 ha for groundmounted systems to be permitted, feedback from the Advisory Planning Commissions and members of public (See attachment 1), raised concerns that this requirement is too onerous and that ground mounted devices are suitable on smaller parcels.

The impetus for a minimum land area requirement is to ensure that there is sufficient land area to mitigate conflict between the use of adjacent parcels (i.e. promoting renewable energy vs. protecting residential amenity).

In response, it is recommended that the minimum parcel size requirement for installing groundmounted system be revised from 1.0 ha to 0.25 ha. While a 0.25 ha requirement would eliminate the placement of a ground mounted system in most low-density residential zones, the option of pursing a development variance permit in these zones would be available to property owners and would further allow adjacent residents an opportunity to review and provide input on such proposals.

Conversely, restricting such devices on lots smaller than 0.25 ha may discourage property owners wanting to install alternative renewable forms of energy.

Setback Requirement:

Setbacks are generally intended to ensure physical separation between neighbouring properties in order to protect privacy and prevent the appearance of overcrowding. Setbacks also play a vital role for parcels adjacent to roadways, to facilitate vehicular, pedestrian and cyclist safety at street and lane intersections.

While a ground mounted systems can reach a height of 7.0 metres, they can also be less than a 1.0 metres in height. These differences can affect the visual intrusiveness of ground mounted systems and this was noted by the Electoral Area "D" APC, which recommended that systems less than 1.5 metres in height be exempted from setback requirements.

Administration notes that the zoning bylaws currently provide similar exemptions for retaining walls and fences less than 1.2 metres in height (i.e. such retaining walls can be placed in a setback, while similar fencing can be placed in a front setback area).

Accordingly, Administration supports a similar exemption for ground mounted systems, and is recommending that ground mounted systems less than 1.2 meters in height be exempt from most setback requirements.

Under these regulations, ground mounted systems that exceed a height of 1.2 meters would be required to meet the minimum setbacks requirements for accessory building and structures under the applicable zoning.

Alternatives:

- 1. THAT Amendment Bylaw No. 2911 not be initiated; or
- 2. THAT consideration of Amendment Bylaw No. 2911 be deferred for the following reasons:
 - i) TBD

Respectfully submitted:

Rushi Gadoya, Planning Technician

Endorsed By:

C. Garrish, Planning Manager

<u>Attachments</u>: No. 1 – Summary of Community Responses

No. 2 – Proposed Revisions to Amendment Bylaw No. 2911

Attachment No. 1 – Summary of Community Responses

Minimum Parcel Size related comments:

- sites smaller than 1 ha could support a ground based/tracker system and this should be decided site by site. Your setback proposals sound reasonable.
- Our installation would be rejected by proposed new bylaws on pretty well every count -- particularly lot size and height of the tower.
- 1.0 ha too large lots as low as 0.25 acre should be considered
- The land size proposed in the bylaws should be greatly reduced to allow any resident to set up solar systems with permit approval.
- Change the minimum parcel size from 1.0 ha to .4 ha (1 acre). This is a typical lot size for rural properties and of adequate size to accommodate a ground-mounted system that would meet the minimum setbacks established by the current zoning.
- Allow solar installations on a minimum parcel size of .25 ha (>.5 acre), as long as the installation complies with the minimum setbacks for accessory buildings and structures outlined for that zoning.
- I would like to see the parcel size reduced to ½ acre for ground mounted systems. As long as the installation can meet the set-back requirements, there is no reason why not to allow a smaller property size.
- A .25 hectare property may be a bit small for some of those structures but to restrict that size would exclude many properties in West Bench
- Just wondering if .5 or 1 H min with the variance option then offering opportunity for a case by case review which might easily allow for situations where there is neighbour agreement or other favourable situations.
- Twin Lakes within Electoral Area "I" be completely excluded from these provisions, as the parcels are relatively small, and proposed regulations if approved would eliminate owners desire to install ground mounted system on their property.

General Comments:

- Need to differentiate between POLE Vs Ground Mounted.
- Should be a Permit Process (Site Lines and Elevations)
- Neighbour Sign-Off treated on case-by-case basis.
- Our solar tracking tower (40 panels) was installed in 2014 and is probably still the largest such installation in the valley. Our installation would be rejected by proposed new bylaws on pretty well every count -- particularly lot size and height of the tower.
- We don't think it's 'obtrusive' at all.
- At the time of installation, we went solar because it didn't look like natural gas was ever going to be delivered to our neighborhood.

- The RDOS should facilitate greater uptake of solar installations to encourage this power option.
- I also see examples of tall, single pole mounted systems, which have a small ground footprint but may go taller than 6 m. In many cases this could be installed with less visual impact that a ground-mounted system.
- We've offset almost 48 tons of carbon and generated enough power to run about 2400 houses for 1 day. Or 4 stadiums, according to the EnPhase microinverter software.
- In summary, your proposed bylaws could be less rigorous when it comes to fostering more solar installations in the valley. Particularly when the need for bylaws seems to have been prompted by some neighbours, feeling there should be jurisdiction when it comes to THEIR view of YOUR yard.
- Promote Solar to reduce peak power loads, emissions, etc. in line with Federal Provincial and Local Current and Future Initiatives.
- South Okanagan and the world are facing climate crisis, all opportunities to adapt to the emergency, mitigate disaster, prepare for grid failures, reduce emissions, and use renewable resources such as solar should be encouraged, supported and subsidized as well.

Rooftop Solar Panels Comments:

• Rooftop panels are often not the best solution in forested terrain like Husula. Ground based panels do much better with regard to aspect and pitch.

Attachment No. 2 – Proposed Revisions to Amendment Bylaw No. 2911

Proposed Definition:

"solar energy device" means a device designed to collect, store and distribute solar energy;

Proposed "Projections" Regulations:

- iii) roof-mounted solar energy devices, may project no more than not project beyond:
 - .1 above the roofline of the building; and
 - .2 **beyond** the outermost edge of the roof.
- b) roof mounted solar energy devices to a maximum of 1.0 meter above the maximum height allowed for the building on which it is installed.
- .3 a ground mounted solar energy system less than 1.2 metres in height may be sited on a parcel less than 0.25 ha in area and within a prescribed parcel line setback area.

Proposed "General" Regulations:

Solar Energy Systems

•1 on parcels 1.0 ha in area or less, a solar energy system shall be attached to a principal or accessory building or structure and shall not:

i) extend beyond the outermost edge of the roof; or

ii) extend higher than the vertical building envelope.

- .1.2 despite sub-section 1, in an Industrial or Administrative and Institutional zone, a solar energy system is permitted on a parcel less than 1.0 0.25 ha in area provided that:
 - i) the device is attached to either a principal or accessory building or structure, and does not extend beyond the outermost edge of the roof;
 - ii) it is in the form of a ground mounted system and does not exceed a height of 1.2 meters; or
 - iii) despite sub-section ii), in an Industrial or Administrative and Institutional zone, a ground mounted system may be sited in accordance with the applicable maximum height and minimum parcel line setback a standalone structure subject to the siting requirements for accessory buildings and structures.