City of Kingston
Information Report to Rural Advisory Committee
Report Number RAC-16-008

To:	**Chair and Members of Rural Advisory Committee**
From:	**Lanie Hurdle, Commissioner, Community Services**
Resource Staff:	**Julie Salter-Keane, Community Projects Manager**
Date of Meeting:	**August 22, 2016**
Subject:	**Large Renewable Procurement Process Update and Draft Landscape and Visual Impact Assessment Guidelines**

Executive Summary:

The Large Renewable Procurement (LRP) program was created to give municipalities a stronger voice and additional opportunities to participate in the development of large scale renewable energy projects. The LRP program is currently administered by the Independent Electricity Systems Operator (IESO) and only applies to large renewable energy projects that produce over 500 kW (0.5 MW) of power.

The LRP I process concluded in April 2016, with the execution of contracts. Having completed the LRP I procurement, the IESO requested feedback from stakeholders, municipalities and Aboriginal communities to understand what improvements could be made to the process prior to the second round of large renewable procurement (LRP II).

After public consultations on the Request for Qualifications (RFQ) were completed, the LRP II process opened on July 29, 2016 with the launch of the LRP II RFQ. The qualification submission deadline is September 8, 2016. Notification of qualified applicants is expected in November 2016. It is anticipated that additional engagement opportunities will be provided prior to the launch of the Request for Proposals (RFP).

During the review of the recently concluded LRP 1 process, staff and members of the Rural Advisory Committee identified a need to develop guidelines to address the impact of large scale ground oriented solar energy facilities on the landscape character of an area. The intent of the guidelines are to provide staff with guidance in evaluating and providing recommendations to Council on the completion of the Municipal Consultation form provided by the IESO.

The purpose of this report is to update the Rural Advisory Committee on the IESO LRP II Public Engagement and to provide the draft Landscape and Visual Assessment Guidelines for consultation and input.

Information received during this meeting and any updates provided from the IESO upon the completion of their public consultation will provide feedback to staff prior to providing an updated Municipal LRP process to the Rural Advisory Committee for consideration.

Recommendation:

This report is for information purposes only.

Authorizing Signatures:

ORIGINAL SIGNED BY COMMISSIONER

Lanie Hurdle, Commissioner, Community Services

ORIGINAL SIGNED BY CHIEF ADMINISTRATIVE OFFICER

Gerard Hunt, Chief Administrative Officer

Consultation with the following Members of the Corporate Management Team:

Denis Leger, Commissioner, Corporate & Emergency Services	Not required
Jim Keech, President and CEO, Utilities Kingston	Not required
Desiree Kennedy, Chief Financial Officer & City Treasurer	Not required

Options/Discussion:

The first phase of the LRP (LRP I) consisted of both a Request for Qualifications (LRP I RFQ) and a Request for Proposals (LRP I RFP) stage. Qualified applicants were then eligible to submit project-specific proposals in response to the RFP that detailed location, capacity and connection point, as well as evidence of meaningful community engagement.

The LRP I RFP was designed to strike a balance between early community engagement and achieving value for ratepayers. Large Renewable Projects proposed through this process must have demonstrated site and resource due diligence as well engagement with the communities in which they were proposing to locate. Preference was also given to projects that demonstrated additional community support and participation from Indigenous Communities.

A formal stakeholder engagement initiative was launched by the IESO on the lessons learned from LRP I and the development of LRP II commenced in early April 2016. The initial engagement process was a survey and webinar-based, with meetings with industry associations, municipal associations and First Nation and Métis communities. Further engagement opportunities will be provided during the subsequent LRP II RFQ and RFP phases.

The LRP program offers a point system based on rated criteria. The point system includes a municipal council support resolution and/or a municipal agreement. The point based system is intended to increase greater communication between the developer and the municipality and provides opportunities for communities to raise local needs and considerations.

During the review of the recently concluded LRP I process, staff and members of the Rural Advisory Committee identified a need to develop guidelines to address the impact of large scale ground oriented solar energy facilities on the landscape character of an area. The intent of the guidelines is to give staff guidance in evaluating and providing recommendations to Council on the completion of the Municipal Consultation form provided by the IESO.

The draft Landscape and Visual Impact Assessment Guidelines for Large-Scale, Ground Oriented Solar Energy Facilities are based on a set of criteria used to rate the significance of a specific LRP project being given consideration for Council support (Exhibit A). The guidelines will assist in determining the level of sensitivity of the landscape and visual receptor, and the cumulative magnitude of change to each. The results of the evaluation can then be used to give an indication on whether the cumulative impact is likely to be acceptable or not. For example, if the significance level for both the landscape and visual criterion are assessed as Moderate High or High, it means the proposal has the potential to create unacceptable cumulative effects.

Staff is presenting this report to the Rural Advisory Committee to initiate discussion and input on the draft municipal process and the Landscape and Visual Impact Assessment Guidelines for large-scale, ground oriented solar projects. Staff will also be consulting with SWITCH (a networking hub and source of technical information and business advice for those involved in alternative energy research, education, project development, policy work and entrepreneurship) on the draft guidelines and to receive input on the municipal approval process.

Upon the completion of the IESO consultation and the posting of the LRP II Request for Proposals (RFP), staff will provide an updated municipal process which will include the Landscape and Visual Impact Assessment Guidelines, to the Rural Advisory Committee for consideration. It is anticipated that the IESO will post the draft LRP II RFP in late 2016.

Existing Policy/By-Law:

City of Kingston Landscaping and Site Design Guidelines for Large Ground Mounted Solar Facilities

Landscape and Site Design Guideline Agreement Template for Large Ground-Oriented Solar Facilities

Notice Provisions:

Not applicable

Accessibility Considerations:

Not applicable

Financial Considerations:

Not applicable

Contacts:

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Other City of Kingston Staff Consulted:

Annemarie Eusebio, Intermediate Planner, Planning, Building & Licensing Services

Exhibits Attached:

Exhibit A City of Kingston Landscape and Visual Impact Assessment Guidelines for Large-Scale, Ground Oriented Solar Energy Facilities

DRAFT Landscape and Visual Impact Assessment Guidelines for Large-Scale, Ground-Oriented Solar Energy Facilities

The City of Kingston recognizes the many benefits created by generating energy through renewable sources and supports the development of large-scale ground oriented solar energy facilities, where they do not create significantly adverse effects.

In recent years interest in generating energy from solar projects has increased. This has increased desire to provide clarity on the cumulative impact assessment for such applications.

The guidelines apply to large-scale, ground-oriented solar energy facilities, where the generation of electricity is the primary use of the property, excluding MicroFIT projects. These types of facilities cover large amounts of land, and can have significant impacts on the surrounding environment, particularly in rural areas that do not generally contain such large-scale facilities.

The guidelines are intended to assist staff in evaluating and providing recommendations to Council on the completion of the Municipal Consultation Form provided by the Province, which the developer must then submit with their REA application to the IESO.

New large scale ground mounted solar energy projects need to be assessed in conjunction with existing solar projects and sometimes other forms of development. The scale of a cumulative impact assessment should be appropriate for the particular circumstances of the proposed solar project. The assessment of cumulative effects is only one of a number of factors considered in the evaluation of a solar project.

Cumulative impacts can be defined as the additional changes caused by a proposed development in conjunction with other similar developments, or as the combined effect of a set of developments taken together.

The Landscape and Visual Assessment Guidelines for Large Scale Ground Mounted Solar Energy Facilities consists of 4 steps as follows:

Step 1: Assessment of the Impact on Landscape Character

Step 2: Assessment of the Visual Impact

Step 3: Determine the Significance of the Impact on the Landscape Character and Visual Impact (matrix score evaluation)

Step 4: Interpretation

Step 1 – Assessment of the Impact on Landscape Character

The cumulative impact of a solar farm on landscape and visual amenity are the product of:

- the distance between the solar farms
- the distance over which they are visible
- the overall character of the landscape and its sensitivity to solar farms
- the siting and design of the solar farms
- the way in which the landscape is experienced

Magnitude or scale of effect on the landscape can be described as high, moderate or low, adverse or beneficial through the assessment of the following:

- loss of key elements of the pre-development landscape
- introduction of elements into the receiving landscape with a resultant effect of changes in overall landscape character

Cumulative landscape effects arise when the development affects the physical fabric of the landscape components (i.e. removing or changing woodland, rural roads, agricultural lands), or the character of the landscape (by introducing new features). Such effects can be both positive and negative.

To be able to arrive at a decision as to whether cumulative change to landscape character is, the following is to be considered:

- what the changes (effects) will be (proposal submission)
- what the magnitude of the change will be in terms of their scale and geographical extent

The cumulative magnitude of change to landscape character can be determined by the size, scale and geographical area; the quality and condition of the landscape, individual features and elements within the landscape; and the aesthetic and perceptual appreciation of the area (as illustrated on Table 1).

Sensitivity of the landscape as a resource can be defined as high, moderate or low and is dependent on the following:

- Character: what contribution does the site make to the character of the area in its undeveloped state? Is it part of a recognizable pattern of elements/attributes specific to the area? Does the site contribute to the area's sense of place and distinctiveness?
- Quality: in what condition is the existing landscape?
- Value: is this landscape valued by people, local community, visitors? Are there special cultural associations? Is the area covered by a landscape, ecological or historic designation? Is the landscape recognized locally, regionally or nationally?
- Capacity: what scope is there for change in the existing landscape character?

Table 1: Assessing Magnitude of Change to Landscape Character

The information given against each rating (low, moderate and high) in the table is for illustrative purposes and is intended to guide the assessment rather than provide a definitive framework for assessing magnitude of change.

Landscape Change	**Magnitude of Change**		
	Low	**Moderate**	**High**
Size/Scale/Compatibility			
What is the extent of the change to the landscape features / characteristics? Is there a loss of key elements of the pre-development landscape (i.e. loss of woodlands, agricultural lands)?	A minor degree of change to landscape features. The landscape features affected have little significance in terms of the wider landscape character.	A moderate change to landscape features, moderate in extent. The landscape features affected are considered key to the wider landscape.	An extensive and substantial change or removal of key individual, or combinations of landscape features. The landscape features affected are key to and positively contribute to the wider landscape character.
How compatible is the proposal with the landscape character?	The development is compatible with the landscape in terms of size, scale, pattern, etc.	The development is inconsistent within the landscape in terms of size, scale, pattern, etc.	The further introduction of elements totally uncharacteristic / incompatible with the wider landscape in terms of size, scale, pattern, etc.
Are there pockets of Class 1, 2 or 3 agricultural lands as defined by the CLI located on the subject properties?	No pockets of agricultural Class 1, 2 or 3 lands on the development lands.	Few pockets of agricultural Class 1, 2 or 3 lands on the development lands.	Large pockets of agricultural Class 1, 2 or 3 lands located throughout the development lands.
Geographical Extent			
What contribution does the site make to the character of the area in its undeveloped state?	Few valued features; the landscape is tolerant of substantial change.	Generally positive character, but there may have been erosion of features resulting in areas of more mixed character and reduced overall value.	A quality landscape with valued features and positive character which is sensitive to change.
Is this landscape valued by people, local community, visitors?	Not valued for any significant feature.	Locally valued by the community but no recognition in the Official Plan.	Recognized in the Official Plan as a significant feature.

Step 2: Assessment of the Visual Impact

Magnitude of visual change can be described as high, moderate or low, adverse or beneficial, through the assessment of the following:

- loss or addition of key elements of the pre-development view
- alteration of the overall composition of the wider view looking at the proportion of the view the development occupies
- over what percentage of the area will the change in view be apparent
- to what extent will the scale, massing, layout and colour of materials contrast with the predevelopment view
- topography of the site and the surrounding landform
- distance between the viewer and the development

Sensitivity of visual receptors can be described as high, moderate or low and is dependent upon the following:

- how the people viewing the landscape might be affected by the proposed change
- the purpose (i.e. recreation, residence or employment, vehicles passing through)
- the context of their view (i.e. location, time of day, degree of exposure)

Different visual receptors will have different levels of susceptibility to changes created by solar energy facilities as shown on Table 2.1

Table 2.1: Levels of Susceptibility of Visual Receptors

	Levels of Viewer Susceptibility		
	Low	**Moderate**	**High**
People who will perceive the change	Users of County or Provincial Roads, train passengers, people at their place of work.	Vehicles using local roads, those working outdoors.	Residents Recreational users – hikers, cyclists. Visitors to popular natural / historic features or attractions (such as Conservation areas, UNESCO sites). Visitor accommodations.

Table 2.2 Assessing the Magnitude of Visual Change

Visual Change Number, prominence, compatibility, scale	**Ratings for Magnitude of Change**		
	Low	Moderate	High
Combined Visibility Assessment			
Looking directly at the development from the road (assuming the proposal site is visible), how many other solar projects are visible?	Only one other relevant development will be visible which is closely associated with the proposal.	The proposal and more than one other relevant developments will be visible within the view.	The proposal and frequent number of other relevant developments will be visible across the view with some developments considered close to the proposed development.
Does the project harmonize with its surroundings or fit acceptably in the project area or are the views generally being eroded or changed?	The development proposal generally fits sympathetically into the landscape, respecting pattern and scale and is not considered jarring. The visual appreciation of the landscape may be slightly affected.	The development proposal is at odds with the landscape, with some disturbance to pattern and scale. The visual appreciation of the landscape may be affected as the view may be changing to a more industrial character.	The development proposal is incompatible with the landscape setting. Developments are generally out of scale and disruptive of the landscape pattern. The landscape may appear cluttered and its overall character changed to an industrial landscape as a result of the combined visual effect of developments.
When travelling on key routes, to what extent will the proposal, in conjunction with other developments, have a visual impact?	The proposal and other relevant developments can only be seen occasionally or seen for a short time and are often not prominent in these views.	The proposal and other relevant developments are regularly seen or seen for a significant amount of time and are often quite prominent in the view.	The proposal and other relevant developments are frequently seen or seen for a significant amount of time and are often very prominent in the view.

Step 3 - Determine the Significance of the Impact on the Landscape Character and Visual Impact (Matrix Score Evaluation)

Steps 1 and 2 explained how to determine the level of sensitivity of the landscape and visual receptor, and the cumulative magnitude of change to each. Step 3 explains how to determine whether the cumulative landscape and visual effects are significant. The following matrix can be used to combine the results of steps 1 and 2 to give an indication of the level of significance of the cumulative effects.

Table 3.1 – Matrix Score Evaluation Combining Sensitivity of the Receptor with the Magnitude of Cumulative Effect

Sensitivity of landscape or visual receptor	**Landscape or Visual Magnitude of Change**		
	Low	Moderate	High
Low	Low	Low Moderate	Moderate
Moderate	Low Moderate	Moderate	Moderate High
High	Moderate	Moderate High	High

Note: A Moderate High or High has the potential to create unacceptable cumulative effects (shown in red).

The following examples give an illustration of the way the matrix can be used to help form a judgement about the overall significance of the cumulative effects:

- where the landscape character is rated of low sensitivity (Step 1) and the magnitude of change is deemed moderate (Table 1), it is not likely that there will be a significant cumulative effect upon the landscape character; or
- where the person viewing the landscape is considered of high sensitivity (i.e. they are going for a walk along a public right-of-way), and the magnitude of change to the view is deemed to be high (Table 1), it is likely that the cumulative visual effect will be significant.

Step 4 – Interpretation

Having arrived at an overall significance level for the proposed development, the final stage in the assessment process is to form a judgement on whether the cumulative impact is likely to be acceptable or not. The scenarios below give an example of how the various scores for significance could be interpreted. These scenarios are intended for illustrative purposes only.

Scenario 1 – The significance levels for each criterion assessed (landscape and visual) are predominantly Moderate High or High.

- This means the proposal has the potential to create unacceptable cumulative effects.

Scenario 2 – The significance levels for each criterion assessed (landscape and visual) are predominantly Moderate, but one of the viewpoints records a High rating.

- This means the proposal has some potential to create significant cumulative effects, but that one particular viewpoint is very sensitive to the cumulative change. The relative importance of this viewpoint may be critical in reaching a judgement about whether or not the proposal is acceptable. For example, an important historic vantage point visited by a great many people throughout the year might attract greater weight than a viewpoint of relatively low importance this is not visited frequently.

Scenario 3 – The significance levels for each criterion assessed (landscape and visual) are varied.

- In this instance it will be important to look at each of the criteria assessed (landscape and visual) to judge whether they are of individual importance and sufficient to influence the overall judgement regarding the acceptability of the proposal. In particular, look at the importance of those criteria which have high levels of significance.

Scenario 4 – The significance levels for each criterion assessed (landscape and visual) are Low to Moderate.

- Low to Moderate cumulative effects are not likely to be significant.