

## **Tolland Solar Frequently Asked Questions**

WR-TGC Solar Generation XVI, LLC (TGC) is proposing to construct two solar developments on parcels of land owned by the Town of Tolland and located at 327 South River Rd and 97 Gerber Drive. Each development will provide 1.3-megawatt (DC) of solar production and consist of approximately 4-acres of solar panels. The Town of Tolland selected TGC to provide these solar developments through a competitive proposal process. Once the systems are constructed, the Town will receive Net Metering Credits from the utility, which allows the Town to reduce their municipal electric bills based upon the amount of solar energy produced. The following document includes answers to some Frequently Asked Questions regarding solar developments.

**1. Will a natural buffer be maintained and/or landscaping provided?**

Yes, TGC has designated areas of existing vegetation to remain as natural buffers, and in addition, is providing over 90 trees and 45 shrubs to help supplement these natural buffers. The planting plan has been developed with the input of the Town's Design Advisory Board. Where residences abut the solar development to the North and South of South River Road, TGC will provide a mixed stand of plantings, including Eastern White Pines, Red Spruces, Fraser Firs, and Red Maples. Along South River Road, the natural vegetation will be supplemented with these tree species as well as understory plantings of Shadblow Serviceberry and Mountain Laurel.

**2. Does the solar development generate noise?**

The solar panels have no moving parts and do not generate noise. The inverter and transformer equipment makes a slight humming noise, similar to a house fan. This equipment will be pad mounted in a location greater than 150 feet from residential buildings, such that the development will have no noise impact on the community.

**3. Is the public at risk of Electrical Shock or Fire?**

In compliance with the National Electric Code, the solar development will be secured by a 7-ft high fence which prevents children and the public from coming into contact with the installations. The developer will provide Knox boxes at the gate such that access can be provided for fire and emergency responders. Overall, the system is less combustible than the existing natural conditions.

**4. Do solar developments produce Electric and Magnetic Fields (EMF)?**

PV arrays generate EMF in the same extremely low frequency (ELF) range as electrical appliances and wiring found in most homes and buildings.<sup>1</sup>

**5. Do solar developments produce glare?**

Solar module glass is designed to absorb (not reflect) light and has less reflectivity than water or window glass. Many projects throughout the US and the world have been installed near airports with no impact on flight operations.<sup>1</sup>

**6. Will the panels break; is there a risk of contamination?**

Solar panels are made of tempered glass, which is quite strong. They pass hail tests, and are regularly installed in Arctic and Antarctic conditions. Only in the unlikely event of a sufficiently hot fire is there a slight chance that chemicals could be released. This is unlikely because most fires are not hot enough to melt PV components and PV systems must conform to state and federal fire safety, electrical and building codes.<sup>1</sup>

**7. Will there be increased traffic?**

Solar arrays are remotely monitored and have no discernable impacts on traffic. Once constructed, vehicular trips will consist of one or two vehicles per month to provide system inspections and maintenance.

**8. How long will it take to construct the system?**

Construction is anticipated to begin in spring of 2016 and construction completed in the fall.

**9. What is the life expectancy?**

A typical solar development has a life expectancy of 20-30 years. As part of the agreement with the Town of Tolland, TGC will provide a Decommissioning Bond posted three years prior to the end of the contract, equal to the cost of the removal of the array and restoration of the site at the end of the term.

<sup>1</sup> MassDEP. "Questions and Answers: Ground-Mounted Solar Photovoltaic Systems." June 2015. Web. 19 February 2016.  
<http://www.mass.gov/eea/docs/doer/renewables/solar/solar-pv-guide.pdf>