

## **How to Review a Solar Power Plant Application**

What's the project's legal name and who owns it? Who will the Developer sell it to? How quickly? Who will do construction?

What is the Developer's legal structure? Is the company a subsidiary? Is the company/developer in the process of being purchased?

Who is buying the electricity - Where is the Power Purchase Agreement? Who is purchasing the electricity? Is it local? Does it benefit the community? Is it being sold outside the district, county, country?

SOILS - Hire independent testing. Developers should not be permitted to self-report.

BATTERY CONTAINER - Climate control? Air conditioning units? Heating units? Dimension of any AC/Heat units? How will this change the visual analysis? Fire suppression? Chemicals in fire suppression? How is this cleaned up? Will it contaminate the soil and water? Does it contain PFAS? Chemicals in batteries? How often are batteries replaced? What is the transportation plan for delivery and removal? Are batteries allowed to be stored on site? How many batteries are stored and for how long? Where and how would batteries be stored? Are specification sheets provided? Are material and safety data sheets provided? Noise analysis? What time of day/night is the loudest noise? What is the mWh capacity for the battery energy storage? How many containers? Cover letters designate size of array, but omits size of battery energy storage.

BIODIVERSITY PLAN: What does the site plan say for seeding details? Is the developer permitted to use pesticides? Herbicides? Is the Developer biodiversity plan required by the Council? Or something that the developer added for marketing purposes? Require independent soil testing. Require independent licensed arborists to perform annual inspections.

CENTRAL INVERTER STATION: Is this a climate controlled container? Where is the AC unit? Does this impact the height of the container? Noise? What is the decibel rating of the unit? Specification sheets? Materials and Data Safety Sheet? Chemicals from equipment? Fire suppression? Chemicals from fire fighter foam? Review the notes and revisions for what the developer omitted and added on during the review process.

CULTURAL HERITAGE: Was this report paid for by the developer? Is there a conflict of interest? Is there any sign of impropriety? Has a developer been accused of manipulating data, information and reports? What is omitted from the report? Can the Council or citizens hire an independent third party to review the document?

CUSTOMER CABIN: Climate controlled? AC unit? Heating units? What is kept in this container? Toxic chemicals? Old batteries? Does this impact the height of the container? Noise? What is the decibel rating of the unit? Fire suppression? Chemicals from fire fighter foam? Review the notes and revisions for what the developer omitted and added on during the review process.

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**CUSTOMER SUBSTATION BUILDING:** Is this climate controlled container? Where is the AC unit? Is there a heating unit? Does this impact the height of the container? Noise? What is the decibel rating of the equipment in the unit? Specification sheets? Materials and Data Safety Sheet? Chemicals from equipment? Fire suppression? Chemicals from fire fighter foam? Review the notes and revisions for what the developer omitted and added on during the review process.

**DISTRIBUTION NETWORK:** Is this a climate controlled container? Where is the AC unit? Is there a heating unit? Does this impact the height of the container? Noise? What is the decibel rating of the equipment in the unit? Specification sheets? Materials and Data Safety Sheet? Chemicals from equipment? Fire suppression? Chemicals from fire fighter foam? Review the notes and revisions for what the developer omitted and added on during the review process

**ENVIRONMENTAL STATEMENT:** Required or Marketing material? Is it the law/requirement or is it padding to make the project more palatable? What do the site plans indicate for plantings, screening, seeding, stormwater management? The developers intent, promises, hopes, wants and pretty pictures are not legally binding. The contractor will construct from a site plan. The Developers submission appears to be promises waiting to be broken.

**FENCE and GATE DETAIL:** Has the Developer self-reported the condition of past projects? Has Council reviewed concerned citizen photos of past projects? Are these images in agreement? Are there similar fences in the district? What are maintenance concerns? Who is repairing the fence and is this in writing? Is there a maintenance agreement for the lifetime of the project? Is there an inspection schedule for the fence and vegetative screening? Are the neighbors on the inspection committee?

**FLOOD RISK ASSESSMENT:** What is the site disturbance for each piece of equipment and concrete pad? How many pieces of equipment? Where is a site plan detailing location of equipment? A color rendering is insufficient representation of Project equipment. Where is a spreadsheet of the site disturbance? Are the calculations accurate? Hire a third party independent stormwater analysis.

**GEOPHYSICAL SURVEY:** Hire third party independent to review the report. Permitting the developer to self report opens the door to impropriety.

**VISUAL ANALYSIS:** Solar power plants can not be screened from a satellite image. Planners real estate agents all use satellite images to determine surrounding areas and desirability of the site. This power plant will permanently change the land use planning for the neighborhood. Lack of commerce, lack of human interaction, lack of activity will permanently alter the development and economics of the neighborhood. Take your own helium balloon and take photos. Do your photos match the developers? Get a drone and submit the video of the site to the Council. Can this site be screened? Have the abutting neighbors submitted photos of their views? Is there a maintenance agreement for the duration of the project? Where is satellite view of neighboring

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homes and proposed solar array? Where is the balloon test? Have the neighbors conducted their own balloon test?

**ACCESS ROAD:** Is the road kept clear year round? Snow accumulation? Are there sufficient turn-arounds? Are there sufficient pull outs? Does it meet the weight requirements for the fire tanker trucks? Will it withstand plowing? Does it meet requirements for the 2021 International Fire Code? National restrictions on battery storage may be more restrictive? Line of sight and safety at entrance to access road? Are there accident studies for the roadway?

**NOISE STUDY:** Developer is self reporting the decibel ratings. Where are the specification sheets for all pieces of equipment? Are there AC units on the containers? Are there heating units on the containers? Tracker panels motors and specification sheets? Do the reports, drawings and calculations accurately reflect the neighboring residences? What does the site plan fine print say for noise? The construction team will not use reports and studies to build the project. What do the drawings reflect? Are the drawings conceptual? Are the drawings accurate and complete? What does the fine print on the site plan state?

**BATS and NEWTS:** Hire third party independent experts to review the Developers documents? What do the locals say? Have concerned citizens submitted their own report?

**PHOTOVOLTAIC LAYOUT:** Are there photos of the tracker panels? Are there cable trays under the panels? How will the vegetation be maintained? Where are specification sheets for the panels? Are there toxic elements in the panels? Are panels coated with reflective coating or anti-soil coatings? What are these coats made from? Do they contain PFAS? How quickly do the coatings deteriorate? Will this harm the soil and water over the lifetime of the project? Are coatings reapplied? How is this done? What are safety precautions to protect the surrounding soil and water? Where is the detail of the inverter substation? Detail of the battery storage system layout? How many containers? Distance between each container? Is this conceptual or actually? Are there 80,850 panels? Where is the specification sheet of panels? How many truck loads? What is the construction traffic plan? This rendering is too crowded. Illegible. Does legend match what's on the drawing? Provide a detail sheet with Detail A tracker panel - where is tracker and motor cabling, specification sheets, noise? Can posts be pounded to this depth? Are all neighboring houses represented on the rendering? What is surrounding this power plant? What is project infancy mortality for the photovoltaic panels in the first two years? How are panels disposed of the first two years? Are the malfunctioning and broken panels left on site?

**PLANTING PLAN:** Developer fails to screen their money making power plant on their own property. Entire power plant should be screened with evergreen trees planted on the power plant's parcel in two staggered rows 20 feet on center with 2.5 meter trees at time of planting. Required to maintain plantings for the lifetime of the project.

**CAMERA DETAIL:** Refer to the revisions and notes. How many omissions were made? Does this reflect the developers skill level? Developer's documents reflect: "The final design and

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resulting detail will be developed in accordance with the principals of this indicative design, but is anticipated to incorporate reasonable variations, following the standard process of undertaking detailed physical site investigations, detailed engineering analysis and competitive procurement of final equipment.” Does this mean the developer, or whomever the project is sold to, can do whatever they want AFTER obtaining Council approval? The Developer’s statement appears to be no different than saying "I propose a solar power plant within this fenced area." It is vague, non-committal and may misrepresent the final project.

**TRACKER PANELS:** Where are the cables for the motors to panels? Underground? Above ground? Where are the motors? Where are the specification sheets? What is the noise level? How will maintenance be done around the cables? What is project infancy mortality of the motors? How are motors and cables disposed of? Are the dead panels allowed to remain on the power plant site?

**GLARE REPORT:** Get an independent report. Citizen’s can use the Solar Forge website.

**SPARE PART CONTAINER:** see above comments about other containers.

**COMMUNITY INVOLVEMENT:** The developers' failure to submit documents on time should not require the community to expedite their review. The Project will impact the district's land use plans for generations. The Project should be fully reviewed for the required time limits. The Development Timeline dated 12.11.2020 reflects that they would submit the application winter/spring 2021 allowing 12-16 weeks for planning decisions. The Developers failure to provide their application in a timely fashion does not warrant a rushed review process during the holiday season when those most impacted, the neighbors and community, are unable to meet. The Developers failure to plan ahead in a timely fashion may be indicative of how they will approach construction. Rushed and short changing the community and environment.

**TRAFFIC MANAGEMENT:** Are the Developers figures correct? The number of truck loads of panels, motors, racking, acres, utility poles, containers, equipment should be verified.

**ARBORIST RENDERING:** Submitted 24 June 2021. Has this been reviewed by independent third party? Whats missing? Whats omitted? Is the screening is adequate.

**ELECTRICAL DRAWINGS:** Are single line, three line and other electrical drawings provided? Trenching detail? Do the drawings site disturbance match what the Developer projects for site disturbance?

**FINAL COMMENTS:** From my experience and mistakes I suggest you focus on what is missing. Which is hard to do when you don't know what to look for. If possible, hire your own solar developer to deconstruct the application and provide a written report that can be publicly submitted to the Council.

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Freedom of Information- Identify the Agencies outside of the Council district that the Developer would be required to submit information to or obtain permits from. Heritage, Transportation, Environment come to mind. If possible submit Freedom of Information requests to the Agencies to obtain Developer's emails, phone calls, documents, approvals and permits. You may find that what the Developer provided to Agencies is different from what they provided the Council and community.

Safety - Maybe I missed it, where is the Fire Brigade report on safety and approval of battery energy storage? Information on battery storage is lacking. Is there fire suppression in the container? Is it fire fighting foam? What chemicals does it contain? In the US it contains PFAS and will permanently contaminate the soil.

Community benefit funds - Are these funds required or voluntary? Does the community view these payments as bribery?

Sanctions on Solar Photovoltaic Panels - I am unable to locate equipment specification sheets. Due to genocide in China's polysilica mines the submission of solar panel specification sheets is critical. If solar panel sanctions are enforced against China then where will the solar panels be manufactured? What is quality control and how will it be made? Request specification sheets and material data safety sheets for all equipment. What is the current status of sanctions against China?

Decommissioning Plan - Where is a decommissioning plan? Where will solar panels be disposed of? Does this landfill accept solar panels? Harvard Business Review published an article documenting that residential solar arrays find it cost effective to replace panels within 15 years. If utility scale projects upgrade panels within 15 years where will panels be disposed of? The developer disclosed the expected number of panels that will fail within the first two years of operation. My research indicates a project infancy mortality of 4% of panels will fail within the first two years.

Where are the council's engineer's review letters and documents? Where is the paper trail discussion between the Council and the Developer?

Where is the Interconnection Report from the Utility Company?

24 hours before the Council/Board meeting check the Developers application for new documents.