RECOMMENDATIONS FOR UTILITY-SCALE SOLAR DEVELOPERS
Best Practices for Land Use and Zoning Project Approval

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Executive Summary

As utility-scale solar projects have become more prevalent in the United States, there has been increasing need for attention to responsible land use and zoning practices. With North Carolina’s rise to the top of the national utility scale solar rankings comes a set of strategies for solar developers, local government officials, and interested community members.

This guide discusses tips and tactics for solar developers, and covers recommendations for legal strategy, public relations, and brand awareness in the context of zoning and permitting.

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Introduction

As utility-scale solar projects have become more prevalent in the southeastern United States, there has been increasing scrutiny on land use and zoning permit applications. Solar developers can increase the likelihood of obtaining local permit by fostering positive relationships with local communities in the development process.

Local governments regulate the land use and zoning approvals necessary for development of utility-scale solar farm through zoning ordinances and comprehensive plans. The policies and laws adopted by the governing bodies of these local governments—city councils, town council, county board of commissioners, county board of supervisors and the like—are the result of input from the citizens who elect them to office, their professional staff, and community needs and desires.

A developer’s first priority is seeing a project through to the finish line. More community education and outreach from developers can both facilitate that goal and bring other intangible benefits, building broader grassroots support for solar that helps pave the way for the next project in that county or a neighboring community. This guide provides recommendations for steps that developers can take to win local acceptance of a new solar project. This kind of local support will increase the likelihood of receiving a permit in a timely fashion.

I. Guidance on Land Use Policy, Community Relations, and the Politics of Local Governments

1. Work with planning staff to understand the existing zoning of your property, the review process for your project, and the comprehensive plan as it impacts your property. Planning staff can also provide good insight into unique features that may raise concerns about your particular property.

2. If the county or town where your solar project is located does not yet have a solar ordinance in place, provide them with a template solar ordinance, using the model ordinance from the North Carolina Clean Energy Technology Center. In Virginia, the Department of Environmental Quality has also developed model local ordinances for utility-scale renewable energy projects. Use these templates as a tool to educate planning boards about the technology and industry-accepted zoning regulation for project development.

3. Institute a community relations protocol. Ask real estate firms or land acquisition companies that you work with, if applicable, about the community education progress to-date when securing a project site; a developer could be inheriting a project set up to fail.

4. Know your decision makers—personally and politically. Make a point to make local politicians feel empowered and educated about your company and the project. By the time a permit hearing takes place, a developer should have a sense of any concerns about the project.

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3. For any permit hearing that is a quasi-judicial hearing, there are important limits on outside communication with the decision makers. See N.C. Gen. Stat. § 160A-381—hearings on conditional use permits and special use permits are quasi-judicial hearings, governed by § 160A-388(e) and (e2)—decisions have to be made based on competent evidence in the record.
II. Legal Criteria for Receiving a Solar Project Permit in North Carolina

A zoning ordinance may allow utility-scale solar farms in a particular zoning district by right, with additional staff review, or with a special or conditional use permit approved either by the governing body or by the Board of Adjustment. Solar farms are generally not permitted in all zoning districts. If a solar farm is not permitted under the current zoning, a rezoning may be required.

Review the zoning ordinance carefully and consult with local planning staff to confirm that you understand the required review and approval process. Planning staff is generally a good resource to assist in understanding the review and approval process, the development history of your property, and to help you identify any unique features of your site or location that may cause problems with your proposal.

The most common way to regulate solar farms in North Carolina is to allow them as a special use permit (SUP) or conditional use permit (CUP) approved by the governing body of the local government. SUP and CUP are quasi-judicial hearings in North Carolina. Testimony is sworn, as it is in court, the rules of evidence generally apply, and the parties are prohibited from discussing the matter with the approving authority outside of the hearing process.

Although each ordinance has its own required findings of fact, the applicant generally has the burden of proof to show with competent, substantial and material evidence that their proposal:

- Does not harm public health and safety
- Does not injure neighboring property values
- Is in harmony with the local area
- Conforms with adopted plans

To meet this standard, the applicant must provide expert testimony as to the required findings of fact. Opponents of a project may also provide evidence to support a denial of an application. Applicants often fail to properly address the finding of fact focusing on harmony or compatibility with the local area. Take care to consider the various land uses surrounding your property, the specific features of your property, including setbacks, plantings, distance between land uses, size, height, grade, other uses permitted within the zoning district, and other factors that may be used to address whether a particular land use is in harmony with the area. An attorney can assist you in preparing a case that meets the state and local law requirements.

III. Legal Criteria for Receiving a Solar Project Permit in Virginia

Like North Carolina, zoning ordinance in Virginia may allow utility-scale solar farms in a particular zoning district by right, with additional staff review, or with a special exception permit (SEP), SUP or CUP. In Virginia, the SEP, SUP and CUP processes are not quasi-judicial. Solar farms are generally not permitted in all zoning districts. If a solar farm is not permitted under the current zoning, a rezoning may be required.
In addition, Virginia has a unique comprehensive plan consistency review that is required for solar farms. All public facilities in Virginia are subject to Section 15.2-2232 of the Code of Virginia, which requires the approximate location, character, and extent of a proposed development to be substantially in accord with the applicable comprehensive plan. Utility-scale solar projects are included within the definition of “public facilities”, and are subject to this comprehensive plan accordance review. The technical scope of this review process varies by locality, and dependent upon local ordinances and/or the discretion of local planning departments, it may be carried out separately or concurrently to any additional permit application reviews, such as a CUP.

**IV. Community Interaction**

Your company’s first impression by a local community usually involve identifying a parcel of land and approaching landowners about an option to lease or purchase the land. Part of the land acquisition process should include a checklist of questions to consider:

**Is the parcel of land near any sensitive places, such as a house of worship, school, airport, place of historic significance, national or state park, wetlands, tourist attraction, or other site of community importance and sensitivity, such as a major road or the entrance to a town?**

If the parcel of land is near any sensitive place, a plan should be developed to address likely community concerns, and local outreach needs to begin early and continue throughout the development process. If neighbors and other stakeholders do not feel informed about the project, it is more likely they will not support a project.

**Have I reached out to all neighbors individually to have an in-person meeting about the project?**

Each developer has their own business plan, but reaching out early to neighbors gives the developer the chance to address concerns early and build good will, to provide factual information before rumors spread, thereby shaping the narrative about the project, and to provide information about the project, including the addressing project appearance.

**Are there any additional stakeholders to consider?**

Reviewing previous permit applications and gaining historic context of past projects in the community, enables developers to identify important stakeholders who may not be directly adjacent to proposed project sites. Local coalitions that have organized to oppose previous developments (solar-related or otherwise) can provide important insight into community values and local politics. In the absence of proactive communications, organized opposition groups can present significant and unpredictable project development risks.

**Have I been realistic with the landowner about the timeline and probability of exercising the option to lease the land, including how another company may buy the rights to this project during the development process?**

**Have I been transparent about any unique aspects of this project?**

Even in localities that are familiar with solar project development, it is important to be transparent about new technologies or nonstandard aspects of a project. This will be increasingly important for solar paired with storage projects.
Have I considered the impact of a proposed project on the agricultural and rural landscape?

Developers can mitigate this concern by transitioning from standard turf grass landscaping to a diverse, native planting mix that attracts pollinators and other wildlife beneficial to adjoining farms and properties. Viewed favorably by local leaders, incorporation of native plants can help projects be seen as a net asset to rural and agricultural communities and secure faster project approval and support. Native plants may also support long-term operational cost savings by reducing the frequency of on-site mowings, weed control and fertilizer application. Several states (MN, MD, GA, WI, MI) and counties have formally adopted or are considering adoption of pollinator-friendly landscaping criteria and a scorecard that has been vetted by leading pollinator experts.¹

These steps may seem basic, but personal notification and initial outreach is often overlooked in the race to secure attractive land parcels. Developers that purchase rights to a lease option should ask the land acquisition firm about the due diligence done with respect to local outreach. For more comprehensive community outreach, a developer may want to hire a land use attorney to help shepherd the project to approval; however, most useful relationships can be created through a local Planning Director or Economic Development Director.

Below are other educational tactics to consider. And remember, timing is key. Start engaging with the community even before the first meeting with a Planning Director or Board. Consider the following educational tactics as ways to build good will and educate community members about solar. If you plan to build multiple projects in the same county or a contiguous county, these tactics can prove especially valuable:

I. Join the local Chamber of Commerce
II. Reach out to local economic development offices
III. Host a local town hall event with a prepared presentation and an open question and answer session
IV. Serve as guest speaker to regularly scheduled meetings of local community groups, such as a Ruritan club or small business association
V. Invite county commissioners/local officials to tour a nearby project
VI. Partner with a local school to host a STEM event with a focus on solar
VII. Sponsor a local sports league to have your brand visibly associated with community involvement
VIII. Host or sponsor a 5K road race
IX. Participate in or host a canned-food drive benefitting a local charity
X. Sponsor a table or booth at the next community-wide festival or parade
XI. Attend a regional or statewide conference in order to gain visibility and network with local officials. All of these conferences will be specific to a state, so check with a local or national trade association for more specific information.

a. Association of County Commissioners annual meeting
b. League of Municipalities annual meeting
c. Planning officials annual conference

¹ [https://www.uvm.edu/sites/default/files/Agriculture/Pollinator_Solar_Scorecard_FORM.pdf](https://www.uvm.edu/sites/default/files/Agriculture/Pollinator_Solar_Scorecard_FORM.pdf)
V. Communications

In addition to the standard notification of a public hearing, it can be helpful to have one or two opinion pieces placed in the local newspaper about the merits of the solar project. If possible, each piece should be tailored to fit a specific project and community. The landowner of a project is usually an appropriate signatory for an op-ed. In addition, identify other community leaders that do not stand to financially benefit from the project to speak about its merits.

A note on messaging: it is important to recognize that climate-friendly, environmental talking points do not always resonate in rural areas. Rather, leading with data on investment, job creation, and economic development can appeal to a wide audience. Your local or national solar or clean energy association can provide data on investment, job creation, and other talking points.

VI. Elected Officials

Legal disclosure: permissible interactions with local government officials before a permit hearing may vary based on the local jurisdiction (small city vs. large county). Please adhere to all laws and regulations that pertain to your project.

The decision makers for a zoning permit may range from sophisticated land use planning professionals to small town politicians. For most of these officials, zoning and regulating for solar will be a new concept. Most developers should expect to act as a resource and partner through the planning board process.

The first step with a local official would be to talk about expectations from the Planning Director. He or she may be able to help guide you through this process and give you tips on what decision makers like to see from permit applicants before, during, and after a hearing. If solar is a new concept, educating these decision makers is key – start with the basics of the technology, the construction process, the benefits to the local community, how you plan to educate and collaborate with the local community, and tell success stories from other states or projects.

VII. The CUP, SUP or SEP Permit Hearing

After a planning board makes a recommendation on a permit, a hearing will be scheduled in front of the jurisdictional body for a final vote. A few recommendations to consider before, during, and after the permit hearing:

I. Prepare and hire experts
   a. Once a date has been set for the permit hearing, the developer needs to put together a presentation about the project development to-date. Be sure to include evidence of community education and interaction, and address concerns you may have heard during outreach. If any modifications have been made to the project design at the request of neighbors or opponents, be sure to highlight your flexibility and willingness to work with the community.
   b. Invite the landowner of the project and any neighbors that are supportive. You may want to prepare a short statement for them to read in support of the project.
   c. Invite any allies you have identified in your community education events.
   d. Hire expert witnesses to address the scientific, engineering, and economic aspects of the project.
i. A health expert can address, if necessary, the lack of any basis for concerns about panel toxicity, radiation, etc.

ii. A soil scientist can address agricultural safety.

iii. An engineer can speak to electrical safety, panel composition, and other system design components.

iv. An appraiser can address questions related to impacts on adjacent and nearby property values.

2. If a developer has followed the recommended community education strategies outlined above, the developer should have an indication of whether opposition will publicly organize against the project at the hearing.

   a. If a developer expects opposition and receiving a permit immediately is not a top priority, ask for a delay in the hearing so individual outreach may be done to address concerns or propose alternative setbacks or buffering.

   b. If a developer expects opposition and receiving a permit immediately is critical to success of the project, please contact your local clean energy association for rapid response assistance. More advance notification will increase likelihood that the association is able to mobilize allies and assist.

3. If a developer has no knowledge of opposition, but anti-solar activists appear at the hearing, a developer can pursue two possible options:

   a. If a developer has an airtight case with expert witnesses in attendance and a strong relationship with the jurisdictional body, proceed with a hearing.

      i. Note: do not dismiss or discount fears of opponents. Use evidence-based arguments to respond to concerns. Anecdotal evidence may win hearts and minds, but evidence-based arguments are crucial if a permit is rejected and thus appealed to the court system.

   b. Ask for a delay and host a meeting to address concerns.

VIII. Appealing a Permit Decision

There have been several instances in North Carolina where CUP or SUP permits have been denied by a governing board and subsequently granted by a judge after an appeal to the court system. In order to be successful on an appeal, the record must show that a developer presented evidence-based arguments that met the evidentiary burden of proof for project approval during the initial permit hearing and any contrary evidence failed to meet the evidentiary standard. In North Carolina, this means presenting evidence and expert testimony that a project meets all of the required findings of fact under the applicable ordinance.

IX. Moratoria

From time to time a community will desire to stop development activity while considering an ordinance amendment or adoption of a new ordinance. Often this is in response to a local government’s past experience with a specific project or in anticipation of a potential future project(s). Most often a local government will adopt a 60 day or longer development moratorium for solar facilities while they revisit their ordinances governing solar development. In North Carolina, an ordinance establishing a development moratorium must expressly include:
1. A clear statement of the problems or conditions necessitating the moratorium and what courses of action, alternative to a moratorium, were considered by the county and why those alternative courses of action were not deemed adequate.

2. A clear statement of the development approvals subject to the moratorium and how a moratorium on those approvals will address the problems or conditions leading to imposition of the moratorium.

3. An express date for termination of the moratorium and a statement setting forth why that duration is reasonably necessary to address the problems or conditions leading to imposition of the moratorium.

4. A clear statement of the actions, and the schedule for those actions, proposed to be taken by the county during the duration of the moratorium to address the problems or conditions leading to imposition of the moratorium.⁵

When a locality considers creating or amending an ordinance governing solar development, this is an ideal time for the community to use the Template Ordinance for Solar Energy Development in North Carolina as a starting point. Please contact your state association as soon as you hear an ordinance amendments or moratorium is being considered. They can offer assistance with proposing or advocating for an ordinance that is fair to solar developers while respecting and protecting the local community.

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⁵ North Carolina G.S. 153A-340(h)

Celebrating its 43rd anniversary in 2017, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry, which now employs more than 260,000 Americans. Through advocacy and education, SEIA® is building a strong solar industry to power America. SEIA works with its 1,000 member companies to build jobs and diversity, champion the use of cost-competitive solar in America, remove market barriers and educate the public on the benefits of solar energy.