

# *Land Use Strategies in the Solar Age*

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*Presented by*

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# *Land Use Strategies in the Age of Solar*

- New Jersey is a leader in the solar energy initiatives that are sweeping the country;
- While few question the goal of renewable energy, there is a need to look at the initiative in a balanced way;
- New Jersey is a serious offender of the single policy focus; In this home-rule state, we often change the rules for the issue that has current priority and we tend to make changes in rules that interfere with the objective;
- Affordable housing is an issue that has resulted in monumental changes at the local planning level due to the presumption that this issue was not been adequately addressed by local master planning;
- While solar energy should not be compared to affordable housing, the point is that substantive regulatory changes have been made to advance solar energy

# *NJ Energy Master Plan*

## State Solar Goal

- 2,500MW of solar energy by 2021
- If you assume 1 MW per 4 acres, this goal will require in excess of 10,000 acres of panels

## Solar Renewable Energy Credits (SRECs)

- Goal is to be achieved by the purchase of SRECs by utility companies; SRECs are a marketable commodity currently being sold at about \$650 per credit;

1,000 kWh = 1 SREC so

1 MW system is capable of selling 1000 SRECs/year representing about \$650,000 in revenue per year

# *Federal Financing Incentive*

## *Federal Tax Credit*

- Solar energy Developers are eligible for Federal Tax Credit equivalent to 30% of the cost of system installation;
- If the system costs, \$30 million to install the system, the developer can obtain a tax credit of \$9 million;

# *Solar Energy Categories*

- Accessory Use – Home/Business/Institutional Solar
- Accessory/Complementary Use- Agriculture
- Principal Use-Publicly owned site
- Principal Use-Privately owned lands (leased or acquired)

Each category has a unique regulatory approach.

# *Small Scale Home/Business/Institutional Solar Accessory Use*

- Incentives
  - Solar rebates for residential installations
  - Property and sales tax exemptions for solar panels & equipment
  - Utility sponsored solar loans
- Regulation
  - Small wind and solar ordinances have been adopted
  - Intent is to avoid visual impact and nuisance conditions

# *Agriculture*

## *Accessory/Complementary Use*

- Eligibility Criteria for Farmland Assessment
  - 1 acre of energy generation permitted for every 5 acres devoted to agricultural production;
  - Maximum of 1% of farm area or 10 acres, whichever is less
  - No more than 2 MW of power can be generated
- Preserved Farmland
  - SADC must approve energy projects on preserved lands;
  - Maximum 110% of base energy demand or 1% of entire farm area
- Right to Farm
  - Proposed Right-to-farm provisions regarding solar energy include site layout standards and requirement to avoid prime agricultural soils to the maximum extent

# *Principal Use-Public Land Ownership*

## Public Policy

Solar facilities on public lands and structures is a good policy for a number of reasons:

- Promotes renewable energy objectives;
- Maximizes the use of underutilized lands such as closed landfills, former treatment plant sites, and other disturbed lands;
- Potential to provide a substantive source of revenue to the public entity or energy savings;
- Results in effective regulatory control of these facilities if sites are properly located and designed;

# *Principal Use- Publicly Owned Redevelopment Area*

- If the project site is a designated redevelopment area, developers can be selected through a proposal process;
- Time consuming process to designate redevelopment areas;
- RFP should include the proposed Developer's Agreement with the terms and conditions that will be the basis of the project;
- Proposers should be allowed to make changes to the terms that will be the subject of negotiations;
- The Developer's Agreement needs to define the responsibilities of the parties; the lease payments; the closure of the facility; and related issues.
- Consequences of either party's failure to meet the conditions precedent need to be defined;
- Unforeseen circumstances;
- Agreement is executed by parties before project proceeds to design and permitting;

# *Principal Use-Public Land Local Lands and Building Act*

- If the project site is not within a designated redevelopment area, the land for a solar project would need to be leased in accordance with the Local Lands and Buildings Act (NJSA 40A-12-1) which requires a fair bidding process
- The terms of the lease or sale need to be clearly specified in a Developer's Agreement contained in the bid documents;
- The Agreement is not subject to negotiation or modification and needs to define the responsibilities of the parties; the lease payments; the closure of the facility; and related issues.

# *Commercial Solar Facilities*

## *Principal Use-Private land*

- If located in redevelopment area, redevelopment plan can be amended to permit and regulate the commercial facility;
- Most major commercial solar facilities will be developed on privately owned land that is acquired or leased for this purpose;
- The issue is how to effectively regulate these facilities thru the zoning and land development review process;
- Should they a permitted or prohibited use? If the local ordinance is silent, they will most likely require a use variance;
- The largest solar facilities will be located on cleared farmland, particularly in the southern part of the state;
- The key locational factors are cleared, flat land; reasonable land and interconnection costs;
- These factors are most prevalent in the southern part of the State;

# *Key Planning Issues*

## *Commercial Solar Facilities*

- Visual impact on residential areas;
  - Mitigate with landscaping, screening, setbacks;
- Termination or closure issues
  - Assurances are needed that equipment will be removed and site restored;
- Community Impact on alternate land use
  - Loss of productive and sustainable agriculture
  - Loss of industrially zoned land
- Off-site impacts;
  - Offsite Poles and equipment
  - Stormwater runoff;
- Absence of local public benefit
  - Equipment is not assessed for local property taxation

# *New Jersey Solar Energy Advocacy*

- Impervious Cover exemption. Law adopted (S921) that specifies that the NJDEP shall not include solar panels “in any calculation of impervious surface or impervious cover” for state regulatory programs or in the review of subdivisions or site plans;
- Municipal Land Use Law (MLUL) was amended to characterize wind and solar energy facilities as “inherently beneficial uses”;
- MLUL was amended to permit renewable energy facilities as a use-by-right on at least 20 acres of contiguous land under common ownership within every industrial district of a municipality.

# *Impervious Cover Exemption*

- When signing the law establishing this exemption, Governor Christie stated *“There is a balance to be struck between responsible land-use law and well-intended but burdensome restrictions that do more harm than good. This legislation removes the regulatory burden, serves our environment by expanding renewable energy assets and serves the economy by creating demand for solar panel production.”*
- State exemption is being interpreted as exempting these facilities from local stormwater management regulation due to the change in the definition of impervious cover;
- Impact of these facilities on actual runoff rate or on the time of concentration can not be fully determined by municipalities due to exemption;
- Impact of ancillary facilities such as substations or electrical equipment yards can be evaluated;

## *Inherently Beneficial Use*

- Judicial creation intended to deal with a narrow range of enterprises that were so universally considered of community value that municipalities should support their inclusion except if such use conflicts with the zone plan.
- Uses that were deemed to qualify were generally non-commercial and institutional in nature and include schools, hospitals, public housing, seeing eye dog facilities; and sewage treatment plants.
- The importance of the inherently beneficial characterization is that in use variance applications the positive criteria are presumed to have been satisfied once it is determined that the use meets this category. Therefore, the suitability of the site for this use is not taken into consideration in demonstrating that the use serves the public welfare and good.
- The amendment to the MLUL was opposed by League of Municipalities since such a definition allows these uses to be located anywhere in the community without demonstrating community benefits and was another example of the interference of the legislature in the local planning process in New Jersey;

## *Significance of Inherently Beneficial Use Categorization*

- How should energy facilities be regulated now that they are considered “inherently beneficial”?
- By definition, these uses are now considered suitable from a use perspective anywhere in the community provided that they satisfy the negative criteria which is that “*no variance or other relief can be granted without a showing that such variance or other relief can be granted without substantial detriment to the public good and will not substantially impair the intent and the purpose of the zone plan and zoning ordinance*”.
- When alternative energy uses pursue variances or other relief, the applicant needs to demonstrate that there is no substantial detriment to the public welfare and that there is no substantial impairment of the intent and purpose of the zone plan. Typically, applicants will contend that any negative impact does not constitute substantial detriment to the public welfare. There may be an impact but it would need to be a substantial detrimental impact for the Zoning board to reject the variance. Furthermore, the onus of demonstrating the proofs has shifted to the public or to the Board’s professionals to demonstrate the impact in an irrefutable fashion.

# *Commercial Solar Energy Facility Regulation*

- Local Regulatory Options
  - Could be silent and rely on the use variance process to regulate;
  - Could permit solar facilities in specific zoning districts to encourage their location in those districts but this approach would not preclude the establishment of these facilities within other districts through use variance process;
  - Could define commercial solar energy facilities as a conditional use to define conditions under which it would be permitted;
- Commercial solar should be regulated in a manner that is cognizant of the need for these facilities and the degree of visual or other impact;
- The greatest impact may be the impact on the alternative use of the land; In the current downturn, landowners are looking for revenue without major permitting or investment but that could result in important tracts being committed to this use for an extended period of time;
- Rollback taxes on qualified farmland increase the potential for long-term land conversion

# *Commercial Solar Energy Facility Regulation*

## *Conditional Use Provisions*

- The conditional use process is the most appropriate mechanism for regulating commercial solar energy facilities for the following reasons:
  - The conditions under which the facility would be permitted are defined and predictable which is important to the review board and the applicant;
  - The impact on the alternative use of land is controlled (i.e., the impact on highly productive lands is minimized);
  - Balances sustainable agriculture and sustainable energy objectives;
  - The objectives of the zone plan with regard to commercial solar are established and must be recognized in the review of the negative criteria when variances are sought in other districts or when variances are sought from the conditional use standards themselves.
  - Allows Facility closure procedures and assurances to be specified.
  - May enable stormwater management performance standards to be applied;
- The key is a well conceived set of conditional use standards that are reasonable in nature that address bulk standards, visual and offsite impacts and facility location;

# *Pinelands Commission*

## *Proposed Solar Planning Principles*

Pinelands Commission is developing solar planning principles that will culminate in an amendment to the CMP later next year.

The proposed regulation would be district specific and would permit solar facilities as an accessory use and as a conditional principal use.

Common conditions for principle solar use would be screening of facilities in all districts; 200 foot scenic setbacks in Preservation, Forest, and Rural Development Areas; revegetation requirement when use is terminated; no offsite facilities in protected areas; and limits on pole height due to visual impact;

# *Pinelands Planning District Proposals*

- Villages: Permit as a conditional use *where the use is compatible with existing structures and use in the Village and where infrastructure does not impact Preservation Areas*
- Regional Growth Area (RGA) & Town: Convert from permitted use to conditional use; deal with PDC use in proposed rules;
- Rural development Area (RDA): Currently conditional use; change to require zoning to account for ecological values;
- Agricultural Production Areas (APA):
  - permit as a conditional use where clearing does not impact areas of significant ecological value;
  - Avoid prime agricultural soils;
  - Defer allocation of PDCs until solar equipment is removed;
  - Permit up to 10 acres of solar at a rate of 20% of the farm parcel;
- Forest Areas (FA); Preservation Areas Districts (PAD) and Special Agricultural Production Areas (SAPA),
  - permit as conditional use on disturbed lands (landfills, mined areas, remediation areas) or on land required to close the facility
  - permit if existing use is subject to site remediation,
  - In lieu of remediation, permit with offsite land protection through PDC program at the rate of 10 acres protected for each 4 acres of solar;

## *Key Conclusions*

- State has made a major commitment to renewable energy;
- Regulations have been modified to support the capital investment in these facilities and to reduce the level of regulation;
- Balance has been tilted in favor of the commercial solar in use variance procedures;
- Conditional use mechanism enables a municipality to support the sustainable energy objective while establishing appropriate and reasonable conditions;
- Conditional uses regulation also increases the predictability of the decision and increases the risk of developers that do not follow local regulatory standards;
- Few municipalities have adopted sustainable elements of Master Plan but that would add strength to local regulation;





***The Alaimo Group***  
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