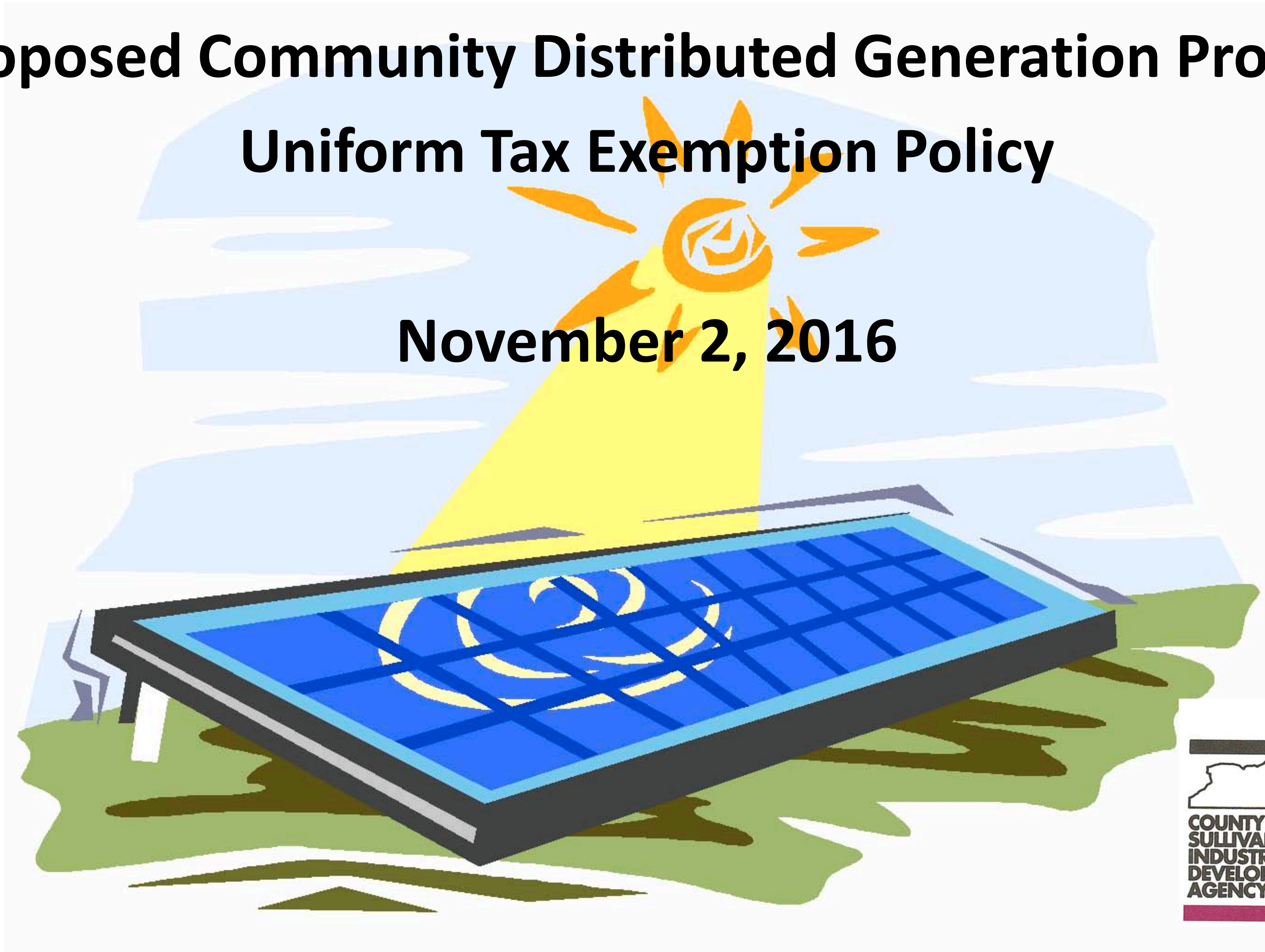
County of Sullivan IDA

Proposed Community Distributed Generation Project

Uniform Tax Exemption Policy

November 2, 2016



COUNTY OF SULLIVAN INDUSTRIAL DEVELOPMENT AGENCY

Background

Renewable energy development has brought significant economic, health, and societal benefits to New York.

As the rate of solar deployment in New York continues to grow, there are several policies that are becoming more important. One of them is how solar PV systems are treated under real property tax law.

In New York State, real property taxes are a local tax, raised and spent to finance local governments and public schools. It is also an ad valorem tax (Latin for “based on value”), and it is based on the value of one’s real property.

Background

Real property is property that is attached to your land, home or business. Personal property is property that is not attached. In New York, solar systems have been categorized as real property.

Real property taxes are paid annually to your village/town/county and school district, and are calculated as $'s per $1,000 of the real property's assessed value.

In Sullivan County, real property taxes typically total $35.00 - $65.00 per $1,000 of assessed value.

Property Tax Policies for Solar Outside NY

Thirty-three states offer some form of tax exemptions for renewable energy. Twenty-two of those states mandate property tax exemptions for 100 percent of the value of solar energy installations over 10 or more years. These states include ones with significant solar development such as California, Massachusetts and New Jersey, as well as states with minimal solar development such as South Dakota, Kansas and Montana. The majority of states recognize the positive financial impact property tax exemptions can have on solar electric development and the local economic benefits of a robust solar industry.

NY Property Tax Exemption

The property tax exemption for solar systems in New York was adopted in 1977 and is codified in §487 of the State Real Property Tax Law.

In 2014, the exemption provided by RPTL §487 was extended through 2024.

RPTL §487 establishes a policy somewhat similar to those in other states, except that local taxing jurisdictions have the ability to opt out of the exemption.

NY Property Tax Exemption

RPTL §487 applies to solar, wind and farm waste energy systems.

RPTL §487 provides a 15-year exemption on real property taxes for systems from the date of system completion.

RPTL §487 is a “default in” statute. It applies to all taxing jurisdictions unless there is local opt out.

RPTL §487 allows jurisdictions that offer the RPTL §487 exemption to negotiate PILOTs. The purpose of a PILOT is to reduce the tax burden and tax rate uncertainty on the property and/or system owner, while preserving some of the forgone revenue that would have been paid in real property taxes.

PILOTs normally require annual payments related to the system’s size (often in dollars per megawatt (“MW”) and cannot exceed the amount of taxes that would be owed without the exemption.

PILOTs

RPTL §487 - sub 9 does not specify when a PILOT should be required, but typically jurisdictions have required PILOTs for projects above a certain size, which are considered commercial scale.

PILOTs across New York have typically required annual payments of $8,000 - $9,000/MW of nameplate system capacity.

State data demonstrates that jurisdictions that remain opted in and provide the real property tax exemption have collected equal or at times better PILOTs than those who had opted out.

PILOTs are sometimes negotiated with developers under straight lease transactions through local Industrial Development Authorities ("IDAs").

PILOTs

For larger facilities that may require a PILOT, the developer must provide written notification of "start of construction" to the taxing jurisdiction(s) when they execute an interconnection agreement with the utility.

Upon notification of the start of construction, a taxing jurisdiction must notify the developer or owner within 60 days if such jurisdiction's intention is to require a PILOT.

The start of construction date has been widely misunderstood, as the execution of an interconnection agreement with the utility can occur very early in the process and long before any on-site construction begins.

Many 60-day notices have been received and due to the confusion, many have been ignored.

Partial Opt-Out Prohibited

Under RPTL §487, jurisdictions are not permitted to conditionally opt out of the real property tax exemption. In other words, jurisdictions cannot choose to tax large systems but not small ones. A jurisdiction that opts out of RPTL §487 to generate tax revenue from larger projects makes solar installations more expensive for homeowners and local businesses.

Opt-Out Consequences

Some local governments are opting out of RPTL §487 so they can tax these multimillion-dollar projects and generate additional real property tax revenue. However, these jurisdictions may find that they will not actually collect substantially more tax revenue from solar or other renewable energy systems because the systems may not be built if they are fully taxable. Real property taxes can have a significant negative impact on the financial viability of solar electric projects, sometimes impacting project economics in a way that prohibits solar electric development.

As of September, 2014, 175 out of 2,308 jurisdictions opted out of providing the RPTL §487 exemption.

Opt-Out Consequences

Jurisdictions that opt out of RPTL §487 may unintentionally prevent solar electric development at the local level. Activity in other states suggests there is less solar development in jurisdictions that opt out of the real property tax exemption, with little to no additional tax revenue collected.

Property taxes on solar systems have a significant negative economic and psychological impact, and discourage the installation of renewable energy. For example, for monthly solar loan and leases in the residential space, property taxes typically flip the economics. Instead of a solar lease costing similar or less per month than customers are paying the electric utility, a system would instead cost more.

NY Community Distributed Generation Program

The New York Community Distributed Generation ("CDG") Program was approved and enacted by the Public Service Commission in 2015. It is part of the New York Reforming the Energy Vision ("REV") initiative, which has the goal of having 50% of the State's electricity generated from renewable sources by the year 2030.

A CDG project is a commercial scale electricity generator with a typical generating capacity of 2 MW, which is large enough to power ~400 homes and is built on 10-12 acres of open land.

NY Community Distributed Generation Program

The NY CDG Program was enacted to support the overall New York REV initiative. There are over 40 initiatives supporting the REV.

REV Goals

- Make energy more affordable for all New Yorkers
- Build a more resilient energy system
- Enable more informed energy choices
- Create new jobs and business opportunities
- Improve New York's infrastructure
- Support cleaner transportation
- Cut greenhouse gas emissions 80% by 2050
- Protect NY's natural resources
- Help clean energy innovation grow
- Have 50% of electricity generated by renewables by 2030

REV Initiatives Overview

- Renewable energy
- Buildings and energy efficiency
- Clean energy financing
- Sustainable and resilient communities
- Energy infrastructure modernization
- Innovation and R&D
- Transportation

There is a strong push by the State to implement programs that encourage renewable energy development that will spur economic growth, develop new energy business models, and reduce greenhouse gas emissions.

NY Community Distributed Generation Program

After approval of the NY CDG Program, a number of solar project developers sent mass mailings to large landowners in an effort to gain site control for projects. These mass mailings to large numbers of property owners with land unsuitable for solar project development has led to much confusion.

Sullivan County is complicated from the standpoint of delivery of electric power. Three utility providers have franchise territory in the County, including Orange and Rockland, Central Hudson and New York State Electric and Gas ("NYSEG"). Electric rates are lowest in the NYSEG territory making it the most challenging from the standpoint of CDG project economics.

NY Community Distributed Generation Program

The NY CDG Program incentivizes development of CDG projects by eliminating State taxes on the projects.

Developers report one barrier to development is the fractured policies encountered when attempting to negotiate a PILOT with Towns and school districts.

A number of Sullivan County Towns have enacted moratoriums and some local land use (zoning) laws have been adopted or are under consideration. Land use regulation uncertainty is also a barrier to development.

CSIDA Community Distributed Generation UTEP

A number of Town Supervisors have requested that IDA consider a Uniform Tax Exemption Policy for CDG Projects. Since local government policies are widely varying, the proposed UTEP would be available to a developer only with the support of the local assessing jurisdiction.

Providing for a uniform PILOT in lieu of individually negotiated County, Town and School District PILOTS will greatly reduce the current confusion. A PILOT based on nameplate generating capacity of a solar array and which ignores the very substantial differences in local property tax rates will put all Towns that support development of CDG Projects on a level playing field.

Administering a PILOT at the IDA level will avoid the need for County, Town and School Districts to collect payments in lieu of tax.

Servicing PILOTs is a primary IDA function, which can be handled with no additional staffing or resources.

CSIDA Community Distributed Generation UTEP

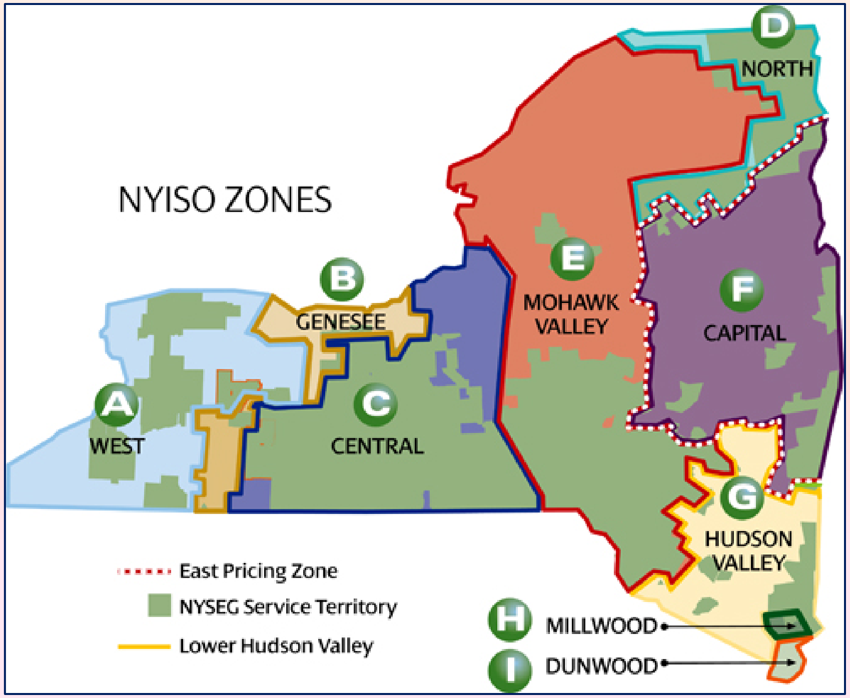
Solar developers have also contacted IDA to voice concerns about the difficulties in negotiating payment arrangements with local governments.

Prospects for financing projects are enhanced if a fixed dollar PILOT-structure is established. Lenders prefer to work within programs that are the most predictable. A fixed dollar PILOT eliminates the risk of changes in assessed value and increases in tax rates.

Load Zone E: NYSEG Population

Most of Sullivan County is located in the franchise territory of NYSEG, which comprises a portion of ISO (Independent System Operator) Load Zone E.

NYSEG Customers in Load Zone E		
County	**2010 Population**	**2000 Housing Units**
Broome	2,407	1,545
Chenango	46,083	21,941
Cortland	2,622	963
Delaware	47,989	28,952
Greene	4,398	4,325
Herkimer	6,322	2,612
Lewis	12,073	6,158
Madison	20,950	7,281
Oneida	18,549	6,881
Otsego	55,855	24,919
Schoharie	3,226	2,673
Sullivan	62,175	35,475
Ulster	3,323	2,939
Total	**285,972**	**146,664**



Sullivan County has the highest population and largest number of households in New York Load Zone E.

CSIDA Community Distributed Generation UTEP

CDG Program subscribers are required to be located within the same ISO load zone and utility company territory as the project they are subscribing to. The 35,475 Sullivan County residential customers can subscribe to any project located within NYSEG territory and Load Zone E, regardless of which Town or County hosts the project.

IDA should impose an obligation on Sullivan County project developers to give preference to Sullivan County residents to sign up for lower cost “greener” electric power. If 10 CDG projects were developed in the County and all available output was locally subscribed, the cost savings to Sullivan County residents (assuming a rate 10% below NYSEG’s default rate) would be as much as $350,000 annually.

CSIDA Community Distributed Generation UTEP

Only a limited number of projects can be built in Load Zone E due to:

- The relatively small customer base (146,664 housing units). A 5% adoption rate will only allow 20 projects.
- Existing limitations on the load zone's utility grid infrastructure to support additional commercial scale electricity generators.
- The obligation of the grid to provide power from other sources when facilities dependent on weather (wind or sun) are not producing power.

CSIDA Community Distributed Generation UTEP

IDA financial assistance available:

Sales Tax Exemption:

- Purchases of otherwise taxable materials installed as part of a CDG Project are exempt from New York State sales tax.
- IDA has the authority to provide an exemption from both state and local sales tax.
- An IDA sales tax exemption fee of one-half (1/2%) percent should be considered since the projects are statutorily exempt from State sales tax.

Mortgage Recording Tax Exemption:

- Lenders will require either a fee mortgage (for projects located on developer owned land) or leasehold mortgage (for projects located on leased land) as security for project financing.
- IDA has the authority to provide an exemption from mortgage recording tax.

Real Estate Tax Exemption

Under RPTL §487 there would be no ad valorem real estate taxes during the State’s 15 year exemption period unless a local assessing jurisdiction opts out. Note that there is no exemption for special district taxes.

Under the proposed IDA UTEP, a PILOT would provide predictable recurring revenue to taxing jurisdictions over a 20 year period with all unintended consequences of opting out of RPTL §487 avoided.

A PILOT could be structured with a base amount assuring taxing jurisdictions with a predictable minimum annual payment. The PILOT should also include upside for taxing jurisdictions in the event electric rates increase.

CSIDA Community Distributed Generation UTEP

The proposed UTEP would establish $20,000 as an annual PILOT floor for a 2MW project ($10,000 per 1 MW of nameplate capacity). To capture some of the upside if electric rates increase, the annual PILOT payment would be the greater of $10,000 per 1 MW of nameplate capacity or 6% of gross revenue from the project's sale of electricity. The percentage of gross revenue calculation in the example that follows is based on the sale of electric power at 9.5¢/kw with a 2% annual escalator.

CSIDA Community Distributed Generation UTEP

	Base	6% of Revenue		
	10,000 @ 2MW	9.5¢ w/ 2% Escalator		
Year	PILOT	Rate	Revenue	PILOT
1	20,000	0.095	329,875	19,793
2	20,000	0.097	336,305	20,178
3	20,000	0.099	343,031	20,582
4	20,000	0.101	349,891	20,993
5	20,000	0.103	356,889	21,413
6	20,000	0.105	364,027	21,842
7	20,000	0.107	371,307	22,278
8	20,000	0.109	378,734	22,724
9	20,000	0.111	386,308	23,178
10	20,000	0.114	394,034	23,642
11	20,000	0.116	401,915	24,115
12	20,000	0.118	409,953	24,597
13	20,000	0.120	418,153	25,089
14	20,000	0.123	426,516	25,591
15	20,000	0.125	435,046	26,103
16	20,000	0.128	443,747	26,625
17	20,000	0.130	452,622	27,157
18	20,000	0.133	461,674	27,700
19	20,000	0.136	470,908	28,254
20	20,000	0.138	480,326	28,820
Total	**400,000**			**480,676**

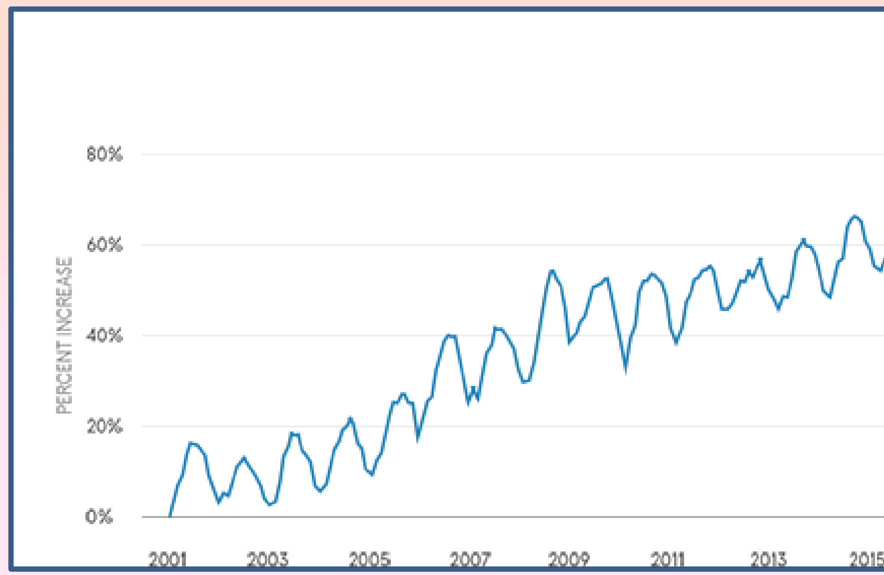
NYSEG Rates

Below are rates for NYSEG residential utility customers over the 3 year period 11/1/2013 – 10/30/2016:

Monthly NYSEG Rates - Residential SC1													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2013											0.0739	0.0888	0.0813
2014	0.0893	0.1022	0.1110	0.1320	0.1354	0.1082	0.0978	0.0938	0.0974	0.0937	0.0961	0.0986	0.1046
2015	0.1033	0.0957	0.0869	0.0699	0.0896	0.1107	0.0946	0.0897	0.0985	0.0783	0.0948	0.0854	0.0914
2016	0.0773	0.0848	0.0787	0.1017	0.1021	0.0795	0.0904	0.0798	0.0890	0.0986			0.0882
Average	0.0900	0.0942	0.0922	0.1012	0.1090	0.0995	0.0943	0.0878	0.0949	0.0902	0.0636	0.0613	0.0914

NYSEG is implementing a step-up tariff that will increase every year over the 3 year-period which began in July, 2016.

The 3-year historical average rate with the addition of the full tariff is 0.1032/kWh



Average Monthly Retail Price of U.S. Residential Electricity

U.S. Energy Information Administration

Solar Job Creation

New York State's solar market is one of the fastest growing solar markets in the country. Installations grew by 575 percent from 2012 to 2015. During the same time period, the US as a whole saw a 146 percent increase. New York State ranked seventh nationwide for cumulate solar installed capacity in 2015.

The solar industry is creating jobs across the State with more than 600 solar companies employing more than 8,250 people. In 2015, the solar industry added approximately 1,000 new jobs throughout the State, a 13.3 percent increase over 2014 job growth. The solar job market in the State is projected to grow another 11.6 percent in 2016, which means adding nearly 1,000 more jobs.

With an average wage of $22.02 per hour, the solar industry is responsible for creating thousands of living-wage jobs that allow workers to contribute to their local economies. Most jobs are local or regional and cannot be outsourced.

Job Creation

CDG projects will create short-term and long-term jobs in Sullivan County. A project has an estimated minimum life of 20 years. The installations will need ongoing maintenance, repair, and management.

The construction time line for each installation is 4 - 6 months. Short term job creation during the construction period is estimated as follows:

Short-Term Job Creation - Full Time (4-6 Months)	
Job	**# Jobs per Project**
Survey	4
Panel Installation	12
Temp Road Construction	6
Trench/Backfill	6
Interconnection	4
Clean-Up	4
Total	**36**

Long-term job creation assuming five (5) projects are built and maintained in Sullivan County is as follows:

Long-Term Job Creation - (20 Years)	
Job	**5 Projects**
Landscaping & Array Cleaning	2
System Maintenance & Repairs	1
Sales / Customer Care Management	1
Sales / Customer Care Associates	1
Total	**5**

Recommendation

The UTEP will require each project applying for financial assistance to have support from the host Town.

The UTEP should include a requirement to allow Sullivan County residents and businesses a buying preference.

The UTEP should require the Town recommending a project to remain in the 487 tax exemption program so that residential and small business on-site solar energy systems can flourish.

The UTEP should target the delivery to consumers in Sullivan County of an electricity rate that is 10 percent less than the utility company default rate, averaged over a 36 month period.

Summary

Demand by developers to construct projects in each ISO load zone is intense. All Sullivan County Towns have zoning laws and require reviews at the local level not required in Towns without land use regulations.

To date, not a single CDG project has started construction in Sullivan County.

Adopting a CDG Program UTEP is a way to simplify the now challenging negotiation of PILOT payments with multiple taxing jurisdictions, often with different objectives.

Adopting a CDG Program UTEP is a way to bring jobs and long-term predictable PILOT payments to Sullivan County taxing jurisdictions.

Adopting a CDG Program UTEP is a way to deliver fair and appropriate PILOT revenue to the taxing jurisdictions and relieve them of the burden of negotiating and administering PILOTs.