



GreenLantern
S O L A R

Town of Bristol
Bristol, Vermont

Group Net Metering Proposal

February 13, 2020



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To: Town of Bristol
1 South Street, PO Box 249, Bristol, VT 05443

Attn: Valerie Capels, Town Administrator
Members of the Select Board

RE: Group Net Metered Solar Proposal for the Town of Bristol

Thank you for the opportunity to present how Green Lantern Group proposes to bring solar net metering to the Town of Bristol. We are pleased to submit our qualifications and a proposal outlining how the Town of Bristol can offset a significant portion of its electricity use with **clean, locally produced renewable** electricity and simultaneously enjoy **approximately \$4,000 in annual savings (\$80,000 over 20 years)**, with no up-front investment, lease, or other initial financial commitment. The above estimate of allocation and savings for the Town of Bristol is based upon annual electric billing data obtained in mid-2019 from Sally Burrell, Energy Committee, for the following electric accounts, employing a number of standard assumptions we would be happy to explore in detail with you:

14020000 - SOUTH ST HOLLEY HALL
1684120000 - MAIN ST ORNAMENTALS,
1982120000 - AIRPORT DR THE HUB,
3708756048 - 79 WEST ST FIREHOUSE
6383020000 - SOUTH ST WATER DEPT/PUMP HOUSE RD,
7893020000 - OLD GARAGE-PINE ST,
9893020000 - PINE ST NEW GARAGE,

Green Lantern will coordinate the development and permitting of the project site (located on the Rathbun property on Route 116 South), financing, construction, and long-term ownership, operations and maintenance. There is no investment required by, or any cost to, the Town of Bristol in order to participate, and as a member of the net-metering group the Town of Bristol will receive guaranteed utility savings.

Permitting Process

Green Lantern has developed, financed, and constructed scores of projects of this solar array type. We file Vermont Certificate of Public Good applications with the Public Utility Commission for such projects on an ongoing basis. We are also experienced in successfully working with local government and state agencies throughout the permitting process. The proposed array has already received its Certificate of Public Good. (Please see attached qualifications, credentials, and reference project information.)

Financing

The Green Lantern Group has been the most reliable developer and financier of commercial net metering solutions for institutional customers in Vermont over the past 10 years, with total financing transactions

nearing \$100 million for over 50 MW AC of projects. Green Lantern will own and operate the facilities, and Green Lantern’s asset management team will oversee all operations, maintenance and customer relations for the project. As a net metering services customer, the Town would not need to be involved in the financing, operations, or maintenance of the facilities.

Summary of Key Details

Net metering allocation to Bristol:	228,635 kWh/year
Value of Net Metering Credits from Green Mountain Power:	\$0.17417/kWh
Green Lantern Contract Price	\$0.15675/kWh (90% of \$0.17417)
Utility Savings for Bristol:	\$0.01742/kWh (10% of \$0.17417)
Potential Utility Savings (total annual):	Approx. \$4,000
Term:	20 years (with renewal options)
Total forecasted electric savings over 20 years:	Approx. \$80,000

Assumptions; Array Production

Please also note, based on our experience, that 150 kW AC of total capacity typically produces about 260,000 to 270,000 kWh/year at Vermont’s latitude and with Vermont’s weather; final production estimates will depend on the site attributes and engineering constraints. Solar cells’ output degrades at an estimated rate of 0.5% per year.

Scope of Work, Contractors, and Timeline

Green Lantern is responsible for negotiating and executing the group net-metering agreement and for developing the project, assisted by our team of Vermont-based legal, engineering, and other consultants, including the following:

- Legal support, permit application: **Green Lantern General Counsel David Carpenter, Esq.**
- Civil engineering and array design: **Krebs & Lansing**, <http://www.krebsandlansing.com/>
- Environmental consulting including wetland permits and RTE: **Arrowwood Environmental**, <http://www.arrowwoodvt.com/>
- Electrical engineering, system impact studies, grid interconnection design: **Solar Power Engineering**, <http://solarpowereng.com/>
- Aesthetic, visual impact, and historic studies: **TJ Boyle**, <http://www.tjboyle.com/>)
- Electrical contractor for array construction: **E & S Electric Company, Inc.**, a Vermont firm that brings extensive experience in commercial-scale solar array installation: http://www.eselectriccompany.com/E%26S_Electric_Company/Index.html,
- (In the case of ground-mounted systems) Post and rack placement, geotechnical engineering: **RBI Solar**, <http://www.rbisolar.com/>
- Landfill, brownfield, and gravel pit geotechnical expertise; Phase 1 Environmental Site Assessments: **Sanborn Head**, <https://www.sanbornhead.com/>
- Long-term asset management and customer account management: **Brattleboro Solar Management**, <https://www.brattleboromanagement.com/>

Overview of Green Lantern

The Green Lantern Group of Waterbury, Vermont is a full-service development consulting, Engineering-Procurement-Construction (EPC), and asset management firm with expertise in community and commercial/industrial-scale solar and battery storage. Green Lantern has developed financing solutions that allow companies, local and state governments, schools, nonprofits and public institutions to participate in, and benefit from, community solar installations without any up-front investment.

As the EPC, we sub-contract with Vermont-based, best-in-class engineering firms, electricians and other trades. As the financing coordinator, we partner with investors and lenders for long-term financing. Collectively we deliver turnkey solutions for development, construction, financing, ownership and operations. As of the end of 2019, Green Lantern had developed over 50 MW of solar capacity representing 80+ projects in 66 Vermont towns that are either operating or permitted and under construction, representing close to \$100 million in total investment. We currently have another 20-25 solar and storage projects in development around Vermont. (See Reference Project list, attached)

In their 2018 ranking of solar developers, Solar Power World ranked Green Lantern #1 in Vermont and #20 in the entire USA, based on new capacity commissioned. In 2019, Green Lantern ranked in Solar Power World's top 100. We are anticipating a return to top ranking in Vermont for 2020.

A look at our current level of activity, in Vermont alone:

- **18** arrays constructed during 2019, ranging from 150 kW, AC to 6,000 kW, AC
- **14 MW, DC** of array capacity constructed during 2019
- **39,092** total solar panels installed in 2019
- **57,213,000 kWh** annual production of entire Green Lantern array portfolio, 2019
- **\$10,870,470** worth of power produced annually, 2019
- **\$144,400** in total solar taxes paid to VT State Education Fund
- **\$306,850** in total local solar taxes paid
- **\$1,413,161** in total annual savings enjoyed by Green Lantern net-metering customers (off-takers)

Together with our team of contractors, Green Lantern understands the financial considerations that impact large public-sector, non-profit, and industrial electricity consumers. Utility expenditures are a significant expense. We develop high-quality solar and storage projects at the lowest capital cost possible, to deliver maximum savings to customers over the useful lives of the projects. We achieve this through strategic value engineering, and by leveraging federal and state tax credits as part of the financing structure.

We hope that the Town of Bristol is satisfied with the information we have presented and accepts this proposal. We look forward to a conversation about how to best serve your peak demand reduction needs and put both existing and new solar sites to further productive use.

If you have questions or concerns, please do not hesitate to contact me or our Director of Development Ralph Meima.

Sincerely,



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ADDITIONAL CONTACT:

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