# 1 Chester Solar Working Group Recommendation:2

4 **Summary Recommendation**: The Town of Chester should engage a solar installer to construct 5 an array at 50 Dump Road. Revision's proposal is estimated to generate \$2.48M in 6 savings/revenue over 35 years. Estimate is based on historical and forecasted rates by the US

7 Energy Information Association. High forecast is \$3m in revenue, lowest forecast is \$1.5m.

9 Process Review. The SWG spent an estimated 300 hours through the following 4 project 10 phases to arrive at our recommendation.

#### • Phase 1: Information gathering.

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- Learning the pros and cons of solar installations through public records of neighboring towns' programs & guest speakers at the SWG's bi-weekly meetings.
- Learning the details of the proposal not chosen by the Town of Chester in 2023.
- Pulling data from BOS office regarding town energy usage and costs.
- Receiving information from Clean Energy NH including cost / benefit analysis of different types of arrays and financing solutions.
- o Town outreach, feedback and question gathering via meetings and the town fair.

## • Phase 2: Site determination & Request for Proposal.

- The SWG used the free services of Kearsarge Energy, Greenstreet Energy, Barrington Solar and Revision Energy to examine <u>every</u> undeveloped town owned property for build suitability.
- Based on revenue opportunity which is a function of size, grade, accessibility, wetlands, and proximity of three phase power (among others), three properties were recommended for bidding: 101 Dump Road (salt shed), 50 Dump Road (Transfer station) and 84 Chester Street (behind the Town Hall)
- Based on these recommendations, The Town of Chester released an RFP to 16 prospective bidders.
- As part of the bidding process, a site walk of the three locations was mandatory and completed on October 20th.
   Five solar companies were present for the site walk.

## • Phase 3: RFP analysis

- Bids were received by Revision, Kearsarge and ICA Solar. Each bid included several options for each site.
- The bid from ICA Solar was not considered given it did not include a proposal for building an array.
- The SWG reviewed the Revision and Kearsarge bids in detail constructing a set of questions for each bidder. These questions were reviewed in person with the bidders with both Selectman Couture as the SWG liaison and Selectman Landau as a member of the public.
- Based on the bids, Q&A, and support from Clean Energy NH, the SWG established the following decision criteria:
  - Savings, Maintenance, Decommission, Company Reputation, total power generation, project timeline, origin of parts, wetland setback compliance, ROI, Burn Pile cooperation, view buffer.

#### • Phase 4: Recommendation:

- Highlighted in green in the table below, the SWG recommends Revision

  Energy's proposal 1A. This project would achieve all goals of the Town while honoring all setback requirements. Revision's proposal has the added benefit of being a low-complexity and relatively small array while achieving the goals of reduced energy costs, revenue generation, no up-front costs, and a resulting tax savings to Chester residents.
- While the SWG recommends the Revision proposal, we invite the Selectboard to review both submissions in detail.

SWG DECISION MATRIX	Proposal solution	Savings over 25 years	Full Maintenance provided		Reputation	Power Generation	Project timeline	Manufacturing origin of panels		ROI in millions \$ per MW generated	Burn pile OK	Adequate buffe for back of town
Kearsarge Kearsarge asked to break out projects by discreet plot *	50 & 101 Dump Road and 84 Chester St. inclusive	\$2.7M; \$3.6M w/ net metering	Yes	Yes	Good	8.2 MW	24 Months	Made in South Korea & Assembled in US	Yes **		Yes ***	No
Revision Submissions 1b and 2b were ruled out due to wetland encroachment	Solution 1A 50 Dump Road (Transfer Station)	\$2.5M	Yes	Yes	Good	371 KW	26 Months	Made in South Korea & Assembled in US	Yes	6.75	Yes	N/A (not bid
	Solution 2A 101 Dump Road (Salt Shed)	\$600k Additional savings possible to private citizens	Yes	Yes	Good	1.2 MW	28 Months	Made in South Korea & Assembled in US	Yes	0.5	Yes	N/A (not bio

 Notes: from table above: \*Kearsarge has not supplied a breakdown of the project by property and noted reticence to engage in a project smaller than 1MW.
 \*\*Aggressive setbacks were entered with the assumption they would need to be expanded. \*\*\*Minimal distance from burn pile