**Question Set #1**

1. Why does the RFP call for a 2.2MW system? Various confusion around this as follows:
	1. Net metering policy in NH appears limited to 1 MW, so unclear as to how we can get around this policy.  We have some ideas but were wondering what the Town had in mind as well.  The Town is anticipating the passage of legislation on August 26, 2021 that will enable municipal solar deployment up to 5 Mw.
	2. The landfill appears like it can possibly hold more than 2.2 MW.  Is the 2.2 MW a minimum size and we should try for more? For instance, the electricity usage shown on the RFP for the Waste Water Treatment (WWT) plant appears to need a majority of the what the 2.2 MW can provide.  So should we try to go as large as possible?  No. The 2.2 MW size was derived based on the Waste Water Treatment site as well as the other town buildings listed in Appendix A. As an option, we are looking at separate deployments at the schools, to enable behind the meter usage. We would like to keep the option to expand the landfill in the future for other needs (e.g. EVCS charging).
2. Does the City have a topographical survey of the landfills that can be shared?

Proposed contours for the 86-Landfill are shown on the Landfill Closure Grading Plan by Weston dated March 1985 but no as-built was found. The topography of the 98-Landfill is shown on the As-Built Record Plan by Louis Berger & Assoc (LBA)- January 1999. Settlement may have occurred since landfill closure and preparation of these plans. The most recent topographical survey is a 2020 flyover with 2-foot contour resolution. Both plans are included as Appendix H.

1. Does the City have a map of Landfill 86 showing the submerged drain tiles and the off-gassing vents so that we can hone in on the best layout possible?

The submerged drain tiles and vents are shown on the 86-Landfill Closure Grading Plan (DWG-1 and -2) by Weston dated March 1985. The drain cleanouts and the vents were resurveyed within the last 14 years using GPS and are shown on a separate updated site plan.

Note: Monitoring Well “MW-5” shown in the 86-Landfill Grading Plan no longer exists. The referenced plans are included as Appendix H.

1. If the power from this system will all be for the municipal buildings, which would use up more than a 2.2 MW solar array could generate, then why would there be a need to provide an optional price for the schools?  Where would Derry wish a future array be located for the schools, if this were to be a separate project.  It’s almost impossible to provide a PPA discount rate for the schools now when we don’t have any idea of the additional array location, size, interconnection or RECs. The 2.2 MW system that is requested is for the 3.7M kwh/yr for the municipal buildings (see Appendix A). The schools (2.7M kwh/yr) are an option and as the RFP indicates, site assessments are being performed to determine if the roofs can support solar installations or if there is available land near the schools. It is preferred to install at the schools to maximize behind the meter usage.
2. If proposing a PPA, should that PPA include the energy produced by the existing 90kW system? (FYI, the RFP said it was a 900 kilowatt system, but was this a typo?  The actual array and a previous article mention it to be only 90 kW.)  Will ownership of that 90 kW array be transferred to the winning bidder? This brings a level of complexity to the PPA with an existing system.

The existing system is an 86 kW array that produces about 150,000 kwh/yr. This should not be included in the PPA but viewed as a behind the meter offset.

1. Just to clarify, will the entire 2.2 MW be connected directly to the Eversource grid and then supply all it can to the Waste Water Treatment plant, which would then supply the other Group Members?  The RFP is confusion as it sounds like the Town wants the Waste Water plant connected behind the meter. We want to maximize behind the meter usage at the Waste Water plant so only surplus energy would be exported to the grid.
2. Which Eversource Rate Class are the proposed meters? If the question is regarding the existing accounts, the Wastewater Treatment Facility and the Municipal building (14 Manning St) are GV rate class. All others listed are predominantly G, with the exception of a single municipal lighting account with EOL class. Refer to Appendix A1.
3. Why does the RFP write-up estimate that only 780,000 of the Water Works' energy could be offset behind the meter when the electric bill sheet shows the Water plant consumes 2,096,557 kWh per year?  Is the town only wishing to offset daytime usage? The 780,000 kwh/yr is an estimate that needs to be verified by examining Eversource hourly bills. The 2,096,557 kwh/yr is usage based on 24 hours/day, 7 days/week – the usage tends to be uniform around the clock and by month.
4. The RFP states the Town only mows the landfill once per year.  Are we to assume you have low-growth grass there already?  Or is this just to save money?  We just need to understand if the current grass grows very tall and must be replaced.  The Town is restricted by the Derry Conservation Commission to limited mowing of the landfill to preserve the habitat of the Grasshopper Sparrow. Usually, the first mowing is August and the second mowing conducted later in fall as needed. The Town acknowledges that there may be a need to modify mowing operations if the PV array is installed.
5. Will the Town require a fence to be installed around the array’s perimeter?  The RFP calls for a fence around the transformer, so just wanted to check on the array field too with a ballasted fence.

RFP does not specify the type of transformer and therefore could not specify a fence. RFP reference NEC and NESC standards which may likely contain requirements for a fence around the generating station.

**Question Set #2**

1. To avoid tax recapture risk, will the Town consider a buyout option period that starts at the beginning of year 7 as opposed to the end of year 5? We would consider 7 years but give preference to a 5-year buyout.
2. To accurately calculate savings, should offerors apply an escalation clause to the WWTP avoided cost of electricity of $.13/kWh and the school avoided cost of electricity of $.15/kWh?  If so, what escalation rate? Assume 2%.
3. As an alternative scenario, will the Town consider an arrangement where the WWTP does not consume any generation from the landfill array behind the meter and all the generation from the landfill array is exported? No. This has a negative effect on the business case.

**Question Set #3**

1. The RFQ lists 2.2MW as the size of the landfill array but never specifies AC or DC. Can you please specify the town’s intent? 2.2 MW AC
2. Derry has adopted the RSA 72:61-72 exemption exempting the value of a solar system from property taxes.  Given that the site is a municipally-owned landfill, real property taxes should also be zero.  However, the RFQ alludes to a PILOT in a lease scenario.  Does the town agree, however, that no taxes would be due under the present scheme? If the Town purchases the panels, there is no property tax liability. If there is a lease – proposers should not assume that there will be any tax relief as the local adoption of RSA 72:61-72 local adoption applies to residential solar only. Therefore, a PILOT agreement with the Town Council would be required if there was any relief from full value of property tax.
3. Please confirm which accounts in Appendix A are Eversource and which are competitive supply. All accounts listed in Appendix A have competitive supply and Eversource distribution.
4. For Eversource accounts, what is the rate class for each and what is the applicable default service supply rate for each?  Refer to Appendix A1 for information, although most accounts are G with the exception of GV for the WWTP and Derry Municipal Center.
5. For those accounts on competitive supply, do they all currently receive a supply rate of $.0675/kwh? Yes, but the rate is .06575/kWh through EDF Energy.
6. What are the terms of the Standard Power supply contract with respect to the application and valuation of net metering credits, and will the town commit to reverting back to default supply upon the 10/31/2023 expiration?  The existing third-party supply contract brokered by Standard Power obligates the Town to purchase supply through 10/31/23. If the proposals received provide a favorable ROI, the Town would review the terms of the contract for buyout provisions. After 10/31/23. Town would revert back to default Eversource supply at the end of the Standard Power contract if required to do so to comply with net metering rules.
7. If not, will the town commit to only transacting with competitive suppliers that value net metering credits at the default service supply rate or otherwise maintain enough accounts on default supply to allow for allocation of all net metering credits the landfill array generates?  N/A
8. Regarding Standard Power’s valuation of net metering credits, at what rate does Standard Power value net metering credits generated from a large customer-generator also registered as a group host? Can the town please supply a copy of the written Standard Power policy concerning valuation of such net metering credits? No information is available at this point, see #19 response as well.
9. The RFQ indicates that the selected Proposer will have the opportunity to make a future proposal for a project, or projects, either owned or leased, to meet the collective load of the schools.  The RFQ states "*Proposer should include optional pricing discounts in their proposal if the schools are added to the project in the future.*"  Can you explain in detail what you mean by this sentence? The proposers are asked to include any discounts that may be at hand for the Town accounts, if the Schools were to be moving to solar through this process. The schools are currently going through an infrastructure review of which solar feasibility for roofs and/or ground installations will be determined. We prefer installations at the schools to maximize behind the meter usage. See Appendix A for usage (2.7 M kwh/yr).
10. Does the Town wish to build separate on-site solar arrays on the schools, which would yield a higher value for the energy produced, or is the Town open to including the schools as group members that receive net metering credits generated from the landfill array? Town prefers installs at each school.
11. Is the usage information supplied for the WWTP net of production of the existing pole mounted 2 axis tracker system?  If not, can you supply 8760 production data for the existing system? Usage is net of the tracker system supply (averages 150,000 kwh/yr).
12. Do you have an as-built cap/landfill closure plan?  We specifically need the location of the drainage tile system.

The submerged drain tiles, cleanouts, and vents are shown on the 86-Landfill Closure Grading Plan (DWG-1 and -2) by Weston dated March 1985. No as-built for the 86-Landfill was found in the Town’s files. The drain cleanouts and the vents were resurveyed within the last 14 years using GPS and are shown on a separate updated site plan.

Note: Monitoring Well “MW-5” shown in the 86-Landfill Grading Plan no longer exists. See Appendix H for the referenced plans to above questions.

1. The current 6’ high chain link fence bounds the south, west and east perimeter.  The north part of the landfill is bounded by Beaver Brook. If it is determined that additional fencing is required to make the facility NEC compliant, is the Town going to perform that scope of work and bear the expense, or is the Proposer expected to take this on?

The Town would expect that the proposer add this cost to their proposal.

1. Please confirm that, in the lease scenario, the Proposer/project owner owns the RECs and is free to monetize them.

The Town confirms that in a lease scenario, the proposer retains the REC credits while still the owner of the panels. If there is a buyout in the future, the Town would then expect to receive the RECs.

1. Please confirm that, in the town ownership scenario, the Town wishes to monetize the RECS the landfill solar array generates. If the town wishes to monetize the RECs, is there an assumed rate you want modeled or is this in the judgement of the Proposer?

The Town seeks to monetize the RECs in an ownership scenario. Although there has been increases in the REC unit prices, the Town would seek for a $35/REC assumption.

1. Regarding Appendix E, “RFP Pricing Template”, please provide a description of what is expected in columns D through J of the “Lease/Buy (PPA) Option.

D = Rate Proposer will charge the Town for electricity produced at the landfill ($/kwh)

E = D x Yearly Production at the landfill ($)

   \*\* correction to title, should read “Town Payments for Proposer Solar Production"

F = Net metering compensation rate ($/kwh) for energy the Town exports to the grid ($/kwh) + yearly escalation factor

G = F x amount of energy exported to the grid ($)

H = Behind the meter savings = 13 cents/kwh x yearly escalation factor x energy consumed behind the meter ($)

I = Other Savings, if any (e.g. demand charges) - must be substantiated ($)

J = Net Cost to Town = E-G-H-I ($)

**Question Set #4**

1. Can you please provide the annual energy costs for each Town and School account?

Appendix A1 has been added with the Town accounts only. School accounts cannot be provided at this time. Proposers shall note that monthly usage/cost spreadsheet in Appendix A1 reflects the period of July 2018-June 2019 when the Town was on a different (higher) third-party supply contract.

1. The switchgear and transformer proposed for interconnection at the WWTP does not have capacity to connect a 2.2 MW PV system. Would it be possible to interconnect directly to the 12.47 kV line with a new larger transformer?

The RFP did not propose interconnection at the WWTP. The intent is to step up the voltage at the array to 12.47kV and connect to the Overhead distribution near the Lagoons.

1. Could the town consider alternatives to aluminum conduit such as IMC? Aluminum conduit would increase system cost.

Galvanized tend to rust over time and becomes unsightly. Aluminum was reference as an option. Use whatever conduit is allowed per NEC for the applications.

1. Addendum C #7 states that “The associated medium voltage circuit breaker (or fuses) with its enclosure shall be located nearby or integral with the transformer”. Is the Town referring to standard bayonet fuses inside transformers or the main MV disconnect that is usually a pole mounted equipment? There are pad mounted options, but those are 3 times more expensive.

It is up to the Proposer to determine the transformer option for this site. The location of the fuses should be applicable to the type of transformer selected. Pole mounted transformers could use line mounted fuse cutouts. A gang operated switch could be offered as an option in Appendix F.

1. Could the Town reconsider the liquid containment requirement on Addendum C #10 that would considerably increase system cost? This is not typical anymore since transformers are very reliable these days and big leaks almost never happen. In addition, transformers use mineral oil or FR3 that are environment friendly and biodegradable.

This requirement can be deleted.

1. Is the existing array 86 kW as mentioned in the site visit or 900 kw as stated in Addendum C #20?

86 KW which averages 150,000 kwh/yr.

**Question Set #5**

1. Is 2.2 MW the suggested size from the RFP, or can the Developer design a larger system if they see fit? 2.2MW
2. Can the Town provide design and/or as-built drawings of the landfill caps?

Available plans include: 1) 86-Landfill Closure Grading Plan (DWG-1 and -2) by Weston dated March 1985 (no as-built was found) and 2) the As-Built Survey Plan (1998), As-Built Record Plan, and As-Built Record Report Vol I & II by Louis Berger & Assoc (LBA) (1999). Refer to Appendix H for plans.

1. Can the Town provide a plan(s) that show the limit of cap for each landfill and the location of landfill gas vents, the subsurface drainage tile system, property line, fence line and utilities (at the landfill and DPW/WWTP/Transfer Station property)?

As-built survey plans for the 98-Landfill are available showing the limit of the cap liner and locations of the gas vents and some utilities and property lines. Proposed Grading Plan for the 86-Landfill shows the subsurface drainage tile system with cleanouts and the landfill gas vents. The cleanouts for the subsurface drainage tile system and landfill gas vents were resurveyed using GPS and are shown on an updated site plan. Property lines, fence line, and utilities along Kendall Pond Road should be considered approximate and based on flyover. Utilities and features at the DPW facilities is available through our GIS.

1. The RFP states that the Town will conduct a site plan review with the Planning Board, please confirm if this is solely the Town’s responsibility or what, if any, role the solar developer would have and plan for?

There is an expectation that the proposer would furnish full size engineering drawings to comply with site plan requirements. There is a further expectation that the proposer would assist the Town in providing technical expertise at the meetings with the Board and abutters.

1. Please provide the landfills closure plan and a copy of the Town’s existing closure permit DES-SW-TP-94-011.

Available plans include: 1) 86-Landfill Closure Grading Plan (DWG-1 and -2) by Weston dated March 1985 (no as-built was found) and 2) the As-Built Survey Plan (1998), As-Built Record Plan, and As-Built Record Report Vol I & II by Louis Berger & Assoc (LBA) (1999). Refer to Appendix H for these plans.

**Question Set #6**

1. Can the Town of Derry provide as-built plans detailing locations of the 15 gas vents and drainage tiles located on LF 86?

Proposed Grading Plan for the 86-Landfill shows the subsurface drainage tile system with cleanouts and the landfill gas vents. The cleanouts for the subsurface drainage tile system and landfill gas vents were resurveyed using GPS and are shown on an updated site plan. Note: Monitoring Well “MW-5” shown in the 86-Landfill Grading Plan no longer exists. Refer to Appendix H for plans.

1. Will the Town of Derry provide updated as-built plans once the gas vent modifications are complete on LF 86?

The only anticipated modifications to the vents would be to increase the height of each to vent above the top of the solar panels. There are no plans to relocate any vents therefore the is no need for updated as-built plans.

1. Will the Town of Derry provide updated as-built plans once the filling and grading of onsite depressions is complete?

There are no plans to update the existing landfill plan.

1. Will the Town of Derry provide an as-built topographical map or recent survey of the landfills that is based on a survey from a licensed surveyor? Preferable resolution for the survey would be 1 ft contours.

The As-Built Survey Plan (1998) and As-Built Record Plan by LBG (January 1999) showing 2-foot contours is available and will be provided. No as-built for the 86-landfill could be found. It is important to note that differential settlement could have occurred over time. A 2020 flyover with 2-foot contours is available.

1. It is our expectation that the PV equipment will operate at a maximum system voltage of 1,500VDC. There may be potential for exposure to insulated conductors to personnel inside the landfill fence. NEC requires minimum setback from grounded equipment and sufficient access about equipment or devices requiring regular maintenance.  For the safety of personnel working inside the fence, what is the preferred / recommended minimum setback distance from the 15 gas vents for the Town of Derry and their maintenance personnel?

The has no preference other than referring to NEC. The Town has a perpetual requirement to maintain the grassed surface on the landfill and access the vents per the NHDES permit.

1. Are bidders allowed to bid any and/or all options? May the bidder purposefully exclude bidding specific options? Bidder should comply with all options or list exceptions in Appendix F.
2. Can the Town of Derry please elaborate on how they came to an estimated system size of 2.2 MW? Is it correct to assume that this estimated system size is the DC size? Estimated on 2.2 MW AC. Refer to Appendix A for yearly Town load of approximately 3.7 million kwh/yr (not including schools).
3. It is our understanding that the NH Net Metering laws only allow for a maximum system size of 1 MW AC. However, after discussions at the site visit on 8/3/21, it is our understanding that the Town expects NH to increase the net metering capacity for municipalities from 1 MW AC to 5 MW AC. Given the large area available on the landfill, we believe more than 1 MW AC could fit on the landfill and would prefer to move forward with the assumption that the net metering capacity will be increased. Will the Town of Derry accept proposals with the assumption that the net metering capacity will increase to 5 MW AC? The Town assumes that legislation will pass on 8/26/21 that facilitates the deployment of the 2.2 MW system as requested in the RFP.
4. Does the Town of Derry anticipate the semi-annual site inspections having any adverse impact on the solar PV system and/or O&M to the system? No.
5. Can the Town of Derry provide closure reports for the landfills?

As-Built Record Report Vol I & II by Louis Berger & Assoc (LBA) (1999) is available for the 98-Landfill. No closure report is available for the 86-Landfill.

1. Has the Town of Derry performed any compaction analysis of the landfill to initially determine if the site can adequately support the added weight of the PV system?

No

1. Reviewing the soil stabilization notes in the RFP documents suggests that the sand and soil stabilization measures currently implemented may be inadequate to prevent erosion post installation of the PV array without a detailed design update to the permanent stabilization features. Can the Town of Derry provide supporting documentation on the frequencies of maintenance activities and relative quantities of eroded materials over the lifetime of the landfill?

Routine maintenance activities performed over the last 15 years have primarily consisted of mowing of the landfill cap, repair of existing vents or gas monitoring probes, addressing animal burrows, and herbicide spraying of drainage swales. Repairs consisted of repairing damaged perimeter fence caused by motor vehicle accidents and repair of minor slumping of the 86-landfill cap southern slope along Kendall Pond Road which is estimated to have only required a few cubic yards of fill.

1. Does the Town of Derry have a preferred solution for the brook’s crossing? Is a directional bore under the stream / brook a feasible option from the Town’s perspective?

The Town has no preference whether the solution is a direction bore under or poles and overhead wires. Proposers are advised to evaluate the wetland impacts and cost/time considerations of either option. Poles are most likely the most economical approach.

1. Appendix C (Electrical Requirements) mentions that interconnection shall incorporate the existing array (900 kW) at the transfer station. Additionally, there was discussion regarding a 150 kW array onsite during the site visit on 8/3/2021. Can the Town of Derry specify where exactly these arrays are located and how it would be incorporated into the interconnection when the NH net metering cap is currently at 1 MW AC. Can the Town of Derry also provide historical production data for both arrays?

There is only on existing array of (86kW+/-) behind the transfer station. Almost all of the generation is used on site. Eversource installed a new meter to record power flow in both directions. No other requirements were made at that time, except to identify the location of the disconnect for the array. With the Larger system other arrangements will be required by Eversource, that may or may not affect the existing array.

1. In terms of Option C, is the intent to propose a system that will offset the School’s 2.7 GWh of annual usage in addition to the usage for the Town of Derry? Or is the intent for a separate system to be designed, in addition to the 2.2 MW system for the Town of Derry, that is intended solely to offset the School’s 2.7 GWh annual usage? In other words, does Option C require two separate systems, or can one larger system be design intended to offset both the Town of Derry and the School’s annual usage?  The schools would be a separate project from the landfill. If you believe there would be economies of scale if the school projects are included with your proposal, then please specify if there would be an additional discount for the overall project pricing.
2. Thanks for providing Appendix A. However, Appendix A was just monthly summaries of usage data for the Town of Derry and School accounts but not the actual utility bills. Is the Town of Derry able to provide the bills for our review?

Given the volume of information and time required, copies of recent invoices for the most significant accounts (Derry WWTP and Derry Municipal Center) are added to Appendix A2. School information is not available at this point.

1. Based on the site visit 8/3/2021, it appears the service is at 480V. The RFP states that “For the main meter connection (see Appendix B), the medium voltage is 7200V phase to ground and 12470V phase to phase.” Can you please confirm the IX voltage is at 480V?

The service entrance at Fordway is primary metered at 12.47kV, 3 phase. The Poles and overhead distribution from the Meter down Transfer Lane are owned by the Town. Separate takeoffs at specific buildings provide utilization power at 480 or 208 volts. All owned by the town.

**Question Set #7**

1. Does standard power provide retail energy to Derry WW as well as all other town/municipal buildings?

Yes, all accounts listed on Appendix A are under the contract with Standard Power. EDF Energy is the third-party supplier.

1. Why is the Town not currently interested in entering into a PILOT now?

If the Town purchases the panels, there is no property tax liability. If there is a lease – proposers should not assume that there will be any tax relief as the local adoption of RSA 72:61-72 local adoption applies to residential solar only. Therefore, a PILOT agreement with the Town Council would be required if there was any relief from full value of property tax.

1. If bidders cannot assume a PILOT will be executed, what is the current tax rate for the property?

The 2020 tax rate is $24.34 per thousand of assessed value. The 2020 ratio is 94.4%. The 2021 tax rate will be set in October 2021.

1. Should all bidders use a standard interconnection price to ensure a more even comparison of bids? $0.05/w? $0.10/w?

After some discussion internally, there is no mechanism to accurately predict the cost of Eversource’s interconnection price to the proposers. ***Therefore, all proposers shall carry a $500,000 allowance as an assumed cost in this proposal. If the project proceeds to an actual contract, there would be additional negotiation to incorporate Eversource costs into the final PPA or outright purchase cost.***

1. Can the Town provide any Topography maps for the property?

Topography is available at 2-foot contours based on the 2020 flyovers. Alternatively, topography is available based on the following: Available plans include: 1) 86-Landfill Closure Grading Plan (DWG-1 and -2) by Weston dated March 1985 (no as-built was found) and 2) the As-Built Survey Plan (1998) and As-Built Record Plan by LBA (January 1999).

1. Are bidders required to provide both Pricing options? Or can bidders provide only PPA pricing or only direct purchase option?

The bidder may provide a proposal for either PPA, direct purchase or both.

1. Is the Town willing to wait until after year 7 for the buyout option to become available?

Town prefers 5 year as the starting point but will consider all proposals.