2024 Dairy Digester Research and Development Program Questions and Answers (Q&A)

October 3, 2024

 Could you expand on the definition of "centralized projects regarding Supporting Materials 1.4?" What is encompassed? Would all projects that are part of a cluster (that share a conditioning plant or upgrader facility) need to submit commitment letters? In addition, would two dairies next to each other sharing a digester and conditioning plant both need to submit commitment letters?

The expression "centralized projects" means two dairies moving dairy manure to a single anaerobic digester. While the expression "cluster projects" means "projects that propose to develop centralized dairy digesters serving more than one dairy (also known as clusters or "hub and spoke" model)". These projects could include a hub facility where centrally located operations would occur, such as collecting raw dairy biogas from a group or cluster of existing dairy operations. The hub could serve as a focal point for cleaning and conditioning, upgrading, and injection into a pipeline. The definition of the Cluster Project can be found in Appendix D, <u>DDRDP RGA</u> page #35.

The main purpose of the addition of the Supporting Materials 1.4 language into the <u>DDRDP RGA</u> was to encourage contributing dairies to send their wastewater/dairy manure to a centralized digester (if two or more dairies are coming together as a centralized project) so that it's economical for both parties in terms of cost and encourage the participation of the smaller dairies. Here is the language of the Supporting Materials 1.4 and it can also be found on Application Sections, <u>DDRDP RGA</u> page #16.

"Supporting Materials 1.4: For centralized projects (e.g., two or more dairy operations are submitting a grant application to install a shared solid separator), letters of commitment or support from participating operations (if applicable). Upload as a single PDF file; no total page limit."

All projects that are part of the cluster (that share a conditioning or upgrader facility) do not need to submit commitment letters. Only participating or contributing dairies need to send the commitment letters if they are coming together as a part of the centralized project. This will serve as a commitment from both participating dairies and will be counted as a part of CDFA's record.

2. In a situation where a dairy operation has recently been purchased by a new owner and is undergoing remodeling at the time of application, resulting in no milking cows on-site, what is CDFA's recommendation for obtaining milk

production data needed to calculate the inputs for sections 6a-6c of the DDRDP calculator tool? If part of the herd intended to be relocated back to the dairy operation is currently housed at a different facility, can milk production data be obtained from that location? Alternatively, would historical milk production data from the original owner be preferred?

Historic milk production would be the ideal input to justify milk production numbers, as required in the Energy-Corrected Milk Inputs section which encompasses subsections; 6a- Milk fat %, 6b-Milk true protein %, 6c- Milk produced (lbs/cow/day) of the <u>Benefits Calculator DDRDP Tool</u>. In terms of animal numbers, it would be ideal to get the records of all those animals that are going to join or intend to be relocated back to the dairy operation after the remodeling is completed.

3. Can you give some guidance on how the energy used should be captured on the grant calculator if the dairy has solar, please? If meters used for manure management are connected to their solar panels the energy number is negative, how would we reflect this accurately?

The electricity consumption field (Section 12; projected annual electricity usage after the installation of Biogas Control System) in the <u>Benefits</u> <u>Calculator DDRDP Tool</u> assumes grid consumption, impacts greenhouse gases (GHG), and criteria pollutants emissions calculations. Using this field to estimate only the grid consumption associated with manure management is recommended. While this will cause the energy usage cost-benefit to be low, but it will make the GHG and criteria pollutants more accurate. If hypothetically the solar covered all the manure management energy use, the numbers entered should be at least 0 (not negative). If grid usage can't be parsed out, the recommendation is to enter all energy usage to be conservative.

In either case, the presence of solar and the numbers selected for use in the Benefits Calculator Tool electricity consumption field should be described so it is clear – Attachment 5.1 (Explanation of Assumptions for GHG Calculations) and/or the Description of Stationary and Mobile Sources associated with Manure Management Activities included in GHG Emission Calculations table at the bottom of the Project Data Inputs tab could be used.