Dairy Cares Comments on Progress Toward Achieving Methane Emissions Target from Dairy and Livestock Sector

Dairy Cares appreciates the opportunity to comment on the California Air Resources Board's (CARB) proposed approach and preliminary analysis of "Progress Toward Achieving Methane Emissions Target from Dairy and Livestock Sector." Dairy Cares is a coalition of California's dairy companies and associations, including dairy producer trade associations, milk processing companies and cooperatives. Formed in 2001, Dairy Cares is dedicated to promoting long-term environmental and economic sustainability for California's family-owned dairy farms.

Dairy Cares generally supports the preliminary analysis and proposed approach outlined by CARB during the May 21, 2020 webinar. CARB staff has correctly identified the range of measures needed to achieve the state's goal for livestock methane emissions reductions. CARB's analysis appropriately recognizes the need for additional incentive funding to achieve the state's livestock methane emissions reduction goals. Finally, CARB has identified a sound foundational approach for conducting the required analysis. Our comments address these issues in more detail.

According to CARB's analysis, 2013 methane emissions from the livestock sector account for roughly 55% of all methane emissions in the state or about 22MMTCO2e annually. Of these livestock emissions about 10MMTCO2e is accounted for by dairy manure, 8MMTCO2e is accounted for by dairy enteric emissions and the remaining 4MMTCO2e is accounted for by non-dairy livestock (primarily enteric) (CARB). CARB's 2030 goal is to reduce these emissions by 9MMTCO2e, or 40 percent of the total livestock emissions of 22MMTCO2e annually. Achieving the state's goals of reducing all livestock emissions by 40 percent will require appropriate contributions from each of the above three categories of emissions.

Manure Emissions

Major reductions in dairy manure methane are in process and significant progress continues to be made. According to CDFA, the 108 dairy digester projects and 107 alternative manure management projects (AMMP) funded to date will achieve 2.2MMTCO2e annually or roughly 22 percent of the 10MMTCO2e (CDFA). While significant progress is being made on dairy manure methane emissions under CDFA's Dairy Methane Reduction Programs, more progress will be necessary to achieve the state's goals. Progress will, in large part, be dependent on continuing investments (grants and other incentives) from the state. As the preliminary CARB analysis points out, the target of reducing all livestock emissions by 9MMTCO2e annually by 2030 will require significant ongoing state incentive funding ($85 million/year).

Enteric Emissions

The preliminary analysis also documents the need for significant enteric emission reductions from ruminant livestock in the state. As pointed out in the CARB preliminary analysis, significant research into controlling ruminant livestock enteric emissions is being conducted in California, nationally, and globally. This research is warranted to identify ways to achieve methane reductions not just here in California, but globally. Methane reductions represent one of the important short-term carbon mitigation tools available to offset continually accumulating CO2 emissions from the ongoing reliance on fossil fuels. Despite these global efforts, there is currently no proven commercially available technology to reduce ruminant livestock emissions. While feed additives such as 3-NOP, seaweed, Mootral and others have shown some promise, none are currently available for commercial use in the United States (CARB). SB 1383 also requires extensive review of feed additives by CARB and CDFA including, but not limited to the following:

- Effectiveness
- Cost effectiveness
- Animal productivity
- Animal health
- Consumer acceptance

In anticipation of feed additives being available in the future, the state should be looking to adopt carbon offset protocols, similar to the dairy digester protocol, to incentivize their voluntary utilization by California producers and ranchers.

Dairy Herd Reduction

Reductions in dairy herd (milk cows) in California also directly results in reductions of both dairy manure and enteric emissions (CARB). Since 2013, the number of dairy milk cows in California have seen a small reduction of approximately 3-4 percent. We concur with CARB's preliminary analysis that these trends will likely continue in the foreseeable future due to a number of economic considerations.

Incentives

California's significant progress on dairy manure methane emissions reduction has not happened by accident. It has occurred because California had the foresight to structure a voluntary incentive-based approach to prevent the emission leakage that would occur from command and control regulation. The voluntary incentive-based approach has worked well due to the important availability of incentive funding from CDFA's Dairy Methane Reduction Program. The funding has not only been key to enabling projects but has resulted in leveraging every state dollar with two additional matching private dollars. According to CDFA, the 108 dairy digester projects they have funded to date with $183.4 million dollars has led to the direct investment of over $369 million matching private dollars. The DDRDP program remains highly competitive and important moving forward. Early incentive funding led to the development of digesters on some of the larger dairies in the state, as these projects were able to demonstrate greater economies of scale. Incentive funding is even more important as the state seeks to reduce methane from smaller dairies in the state. While the total costs of these projects is less for smaller dairies, the cost per cow is higher. As a result, to be economically viable and receive outside funding commitments, incentive funding will be even more important moving forward. This is of particular concern in light of recent disruptions in Cap & Trade allowance markets and resulting potential reduced

availability of greenhouse gas reduction funding (GGRF). Equally concerning, CDFA's Dairy Methane Reduction Programs have received reduced funding under the Newsom Administration, which puts much of the early voluntary industry progress at risk of being slowed. Following the final three years of the Brown Administration that provided $248 million to CDFA between 2016 and 2018, funding during the first year of the Newsom Administration (2019) provided only $34 million and the governor's current budget proposal allocates just $20 million for 2020-2021. As CARB's preliminary analysis indicates, funding in the range of $85 million per year will be necessary over the next several years to achieve the state's emission reduction targets. This level of funding is consistent with early estimates by CDFA which suggest at least $500 million in state incentive funding would be required. CARB's analysis also shows funding at the currently proposed $20 million level will prove insufficient to achieve the state's target. Dairy Cares looks forward to working with CARB, CDFA, and the Newsom Administration to provide adequate incentive funding moving forward to achieve the state's methane reduction goals. The annual California Climate Investments report shows that investments in dairy methane reduction projects return significant value to the state, provide significant GHG reduction and tremendous bang for the buck. The DDRDP program remains the state's leading investment in total GHG reduction and the second most cost effective at $9 per ton of reduction.

SB 1383 also requires CARB to "develop" a pilot financial mechanism to reduce the economic uncertainty associated with the value of environmental credits, including LCFS credits from dairy related projects. While CARB has designed and recommended several options for consideration, a pilot financial mechanism is not currently available to further incentivize dairy methane reduction projects. While the lack of availability of this mechanism is important, the impact will be much greater if other incentives and direct grants are subject to reduced funding levels moving forward. As the preliminary CARB analysis shows, with "constrained" funding of only $20 million annually, as currently proposed in the Governor's 2020-2021 state budget, the state's 40 percent livestock methane reduction goal cannot and will not be met.

The analysis should include a robust discussion of the need for and availability of incentive funding. If GGRF funding remains constrained, other incentives under LCFS, the pilot financial mechanism, or other programs should be identified by analysis.

Other Barriers

While significant progress has been made in reducing other barriers to digester implementation, more work needs to be done to ensure continued success. Key improvements to date have included streamlining permits, extension of the BioMAT program, and refinement of the Renewable Gas Pipeline Interconnection Incentive Program at the California Public Utilities Commission (CPUC). Recent efforts to improve the pipeline interconnection process through the development of uniform utility interconnection policies and agreements are also well intended. However, if key issues are not corrected in the Joint Utilities proposed Draft Interconnection Agreement, additional barriers will be erected that could stymie further project development and progress toward dairy methane reductions. Standardizing the process of RNG interconnection across utilities in California is certainly a laudable and important goal. However, utility demands of a $1 million Performance Assurance for every project represents a significant additional and unnecessary cost and step backward relative to existing interconnection agreements. Unless addressed, new barriers to dairy methane digesters will be put in place contrary to the good intentions of the CPUC.

Removing or reducing interconnection costs and barriers remain among the most important steps that can be taken to further reduce barriers to project development. Interconnection costs and requirements are much higher in California than in other states. As a result, California projects remain at a comparative disadvantage with other out-of-state projects which find it far easier, faster, and far less expensive to interconnect to their local utilities and inject gas which is often destined for California transportation fuel (RNG) markets. Expansion of the CPUC's Renewable Gas Pipeline Interconnection Incentive Program will

also be important. This program is expected to run out of funds shortly and remains oversubscribed.

Progress

SB 1383 requires as part of this analysis that CARB, in consultation with CDFA, analyze progress and determine if sufficient progress is being made, market barriers are being overcome and if sufficient funding is being made available. While initial progress had been made, the draft analysis suggests that lack of incentive funds could quickly alter that outcome. Dairy Cares recommends this progress therefore be reviewed again in three to four years to determine if the 40 percent reduction goal should be reduced.

Conclusion

Dairy Cares appreciates the opportunity to comment on the development of the analysis of progress toward dairy methane reductions. We look forward to the opportunity to provide further comments on the draft analysis before a final analysis is complete.

Respectfully submitted,

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References:

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