



**August 30, 2018**

Clerk of the Board  
California Air Resources Board  
1001 I Street, Sacramento, CA 95814

**Re: Proposed 15-Day Amendments to the Low Carbon Fuel Standard Regulation**

Dear Air Resources Board Members and Staff,

DTE Energy Resources Inc. (DTEER) appreciates the opportunity to provide written feedback on the 15-Day Proposed Amendment Package to the Low Carbon Fuel Standard (LCFS) Regulation posted August 12, 2018.

DTEER, through our affiliate DTE Energy Services, Inc., owns and operates three wood waste fueled power projects in California. One of these projects, our Mt. Poso cogeneration project in Bakersfield, is a joint venture with Macpherson Energy Corporation (MEC). DTEER and MEC are presently evaluating the feasibility of carbon capture and sequestration (CCS) in subsurface geologic formations in the vicinity of Bakersfield.

DTEER appreciates the work done by CARB in advancing CCS as means of reducing California's carbon intensity. We believe there are some remaining areas of concern in the revised language that should be addressed as CARB works towards finalizing amendments to the LCFS program.

1. CCS Protocol, Section A(1). Applicability.

DTEER proposes to remove the current language in this section and replace it with the following:

*“The Carbon Capture and Sequestration (CCS) Protocol applies to CCS projects that capture carbon dioxide (CO<sub>2</sub>) and sequester it onshore at subsurface geologic sites that include reliable sealing layers, appropriate geology, and good spatial location, such as those found in an exempted aquifer, a saline formation, or depleted oil and/or gas reservoirs. The CCS Protocol applies to both existing and new CCS projects provided the projects can meet the requirements for permanence pursuant to Section C of this protocol”*

2. In many places within the CCS Protocol, “AOR” has been replaced by “storage complex” or “surface projection of storage complex”. However, in other areas, “AOR” is still used, but is no longer defined. DTEER recommends the following changes in the Definitions section:

- A. Remove part (A) of the definition of Storage Complex in its entirety, and replace with the following (note: part (B) to remain unchanged):

(A) *“The storage complex includes the injection zone (in which the CO<sub>2</sub> is emplaced), a sequestration volume, which is expected to contain the CO<sub>2</sub>, and overlying and possibly underlying geologic formations that are required to provide assurance of storage. The storage complex must include a multi layered confining system that retards vertical migration of CO<sub>2</sub>. The storage complex must extend laterally over (1) the volume from which CO<sub>2</sub> (as a free or dissolved phase) could escape from storage in the subsurface if a permeable pathway exists, and (2) the area over which the plume may migrate.”*

- B. Add a new definition for AOR (which is used within the document but is no longer defined) as follows:

*“Area of review (AOR)” means the area encompassing the lateral extent and depth of the storage complex.*

3. CCS Protocol, Section 2.1 - Site Characterization.

DTEER proposes to replace the existing language in 2.1(a)(5) in its entirety and replace with the following:

(5) *“Depending on the distance between the sequestration zone and basement rock, the Executive Officer may require the CCS Project Operator to identify and characterize additional dissipation interval(s) below the storage complex, or describe active reservoir pressure management procedures (e.g., brine extraction) or other techniques to reduce seismic potential, to limit the extent of downward overpressure propagation and lower the potential for induced seismicity within formations beneath the injection zone.”*

We appreciate the opportunity to share our thoughts on the CCS Protocol. We believe CCS can be a key component of California’s strategy to reduce carbon emissions. DTEER further believes acceptance of the changes described above will help move CCS projects forward in a manner this is safe and protective of the environment.

Sincerely,



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