

## DOCKETED

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## **Production of Renewable Hydrogen for a SMR Project**

Dear CEC,

Our company H2 Renewables LLC that is developing a hydrogen plant for the transportation market is writing this comment to determine the renewable content of hydrogen produced by steam reforming. Our view is that to the extent that the inputs to the production of hydrogen are decarbonized, subject to the requirements of SB 1505, then the percentage of hydrogen that is renewable is equal to the amount of H<sub>2</sub> actually coming from an input. For example, if you take the energy balance of a SMR and green the methane, you have greened the H<sub>2</sub>. If you look at just greening the steam (H<sub>2</sub>O) feedstock by using a renewable energy source to produce the steam, you can declare that the H<sub>2</sub> leaving the SMR is 50% renewable since 50% of the actually hydrogen produced in the SMR is directly sourced from H<sub>2</sub>O and the remaining 50% comes from the methane (NH<sub>4</sub>) that can be either be greened or not. This is similar to looking at an electrolyzer where the percentage of renewable power splitting H<sub>2</sub>O determines the renewable content of the H<sub>2</sub> exiting the electrolyzer.