DIVISION OF RESEARCH, INNOVATION & SYSTEM INFORMATION Research Initial Scope of Work SUBMITTAL FORM - FY 2024/25

I.	Task Title:	Pathways to Powering Caltrans with Zero-Carbon Renewable Energy
11.	Task ID:	4600

III. Project Problem Statement:

To meet the requirements of S.B.1020, Caltrans must develop a strategic plan to generate or procure renewable energy throughout the state to ensure all electricity needs are sourced from eligible zero-carbon renewable energy resources.

IV. Objective:

The objective of this this research is to produce a data-driven white paper that will serve as a starting point for Caltrans tobegin the successful implementation of renewable energy projects and/or purchases in support of S.B. 1020. The white paperwill offer actionable recommendations, scenarios, and scaled costs that aim to assist Caltrans and other stakeholders' decisionmaking on the best approach for procuring carbon free renewable energy in accordance with S.B. 1020.

V. Task Description of Work:

Figure out regulatory landscape to get the renewable energy, Prioritize which account types and utilities system we should pursue, Close look at Caltrans energy portfolio. It is also expected that the research team will look into the Caltrans "Solar in the Right of Way" project as part of this research.

VI. Expected Deliverables:

Individual research report sections, final report and ppts from quarterly meetings

VII. Background:

On September 16, 2022, Governor Gavin Newsom signed Senate Bill (S.B.) 1020 into law, setting a targetfor state agencies to obtain 100% of electricity procured on their behalf from zero-carbon/renewable sources by December 31,2035. As the owner and operator of the State Highway System, Caltrans procures electricity through over 25,000 utilityaccounts across the state to power the system's operation. To meet the requirements of this legislation, Caltrans must developa strategic plan to generate or procure renewable energy throughout the state to ensure all electricity needs are sourced from from eligible zero-carbon renewable energy resources.

VIII. Related Research:

A research Preliminary Investigation determined that this is a gap that needs filling

IX. Deployment Potential:

Stand Alone. However, upon completion of the research project, the Director's Office of Sustainability will incorporate the identified strategies intoDirector's Policies and Deputy Directives. The Office will support districts and divisions to implement the identified strategies into practice, developing implementation timeline(s), and tracking progress until the 2035 target is met.

X. Estimate of Duration:

12 months