**Final Report on the SOLSTICE Project Results**

The SOLSTICE project provided significant insights into the current status, needs, and opportunities to advance its seven specific aims, focusing on the renewable energy landscape, addressing infrastructure and policy challenges, and fostering collaboration among stakeholders. Below is a detailed description of how each of the seven proposed objectives was satisfied through collaborative activities with statewide and regional stakeholders, including the Center for Energy Efficiency and Renewable Technologies, representatives from EDF Renewables, Intersect Power, the Counties of Riverside and San Bernardino, Southern California Edison, the California Energy Commission, the Bureau of Land Management, the Large Scale Solar Association, and the Solar Valley Consortium at UC Riverside.

**Objective 1: Addressing the Climate Crisis and the Grid's Resilience**

The roundtables emphasized the growing impact of climate change on the already strained energy grid. Predictions indicate a significant increase in extreme heat days in Inland Southern California, coupled with the rise of electric vehicles and building electrification, which places unprecedented demands on the grid. The discussion highlighted the urgent need for renewable energy solutions that can withstand these rising demands.

Stakeholders elaborated on the significant growth in electricity demand over the past thirty years, adding pressure to clean energy infrastructure. The path forward involves a combination of solar, wind, geothermal, and storage projects aimed at building a more resilient and responsive grid. This objective was satisfied through a detailed acknowledgment of the climate crisis and its effects, which laid the foundation for stakeholder commitment to providing resilient, clean energy infrastructure solutions.

**Objective 2: Overcoming Barriers to Renewable Energy Development**

A major theme of the roundtable was overcoming the barriers of land availability, transmission infrastructure, and regulatory delays. Stakeholders discussed the significant challenges of transmission and interconnection, including uncertainty about project deliverability and the slow pace of transmission infrastructure development. These delays have resulted in project timelines being extended by several years.

To address these barriers, the conversations focused on strategies to improve the interconnection process and increase grid flexibility. Recent improvements to interconnection procedures and an updated transmission plan, which includes billions in additional transmission funding for the state, were key achievements discussed during the roundtable. The need for continued advocacy to increase deliverability in key areas, including Inland Southern California, was also emphasized.

**Objective 3: Ensuring Efficient Permitting and Land Use Management**

Land use and permitting were highlighted as critical components in achieving renewable energy development goals. Stakeholders noted that while local permitting processes have been effective, significant challenges remain at the federal, state, and county levels. Issues such as staffing shortages and negative sentiments toward renewable energy projects were identified as key obstacles.

Efforts to address these concerns included navigating the regulatory challenges posed by land use and species conservation regulations. The roundtable discussion indicated progress in improving the permitting process, though further advocacy is necessary to streamline regulations and ensure more efficient approval timelines for renewable energy projects.

**Objective 4: Enhancing Transmission Infrastructure for Renewables**

Enhancing transmission infrastructure was a central focus of the discussions. Stakeholders addressed the need for large-scale transmission upgrades to support renewable energy deployment. The conversation emphasized the importance of focusing transmission planning efforts on specific energy zones and working toward increasing grid capacity in areas such as Riverside and San Bernardino counties.

The need for new transmission projects, particularly a proposed 500kV line along the I-10 corridor, was discussed as an essential step toward increasing the region's ability to deliver renewable energy. The discussions revealed ongoing efforts to prioritize and advocate for these necessary transmission upgrades.

**Objective 5: Promoting Community Engagement and Support for Renewable Energy Projects**

Community engagement was recognized as a critical factor in advancing renewable energy projects. Stakeholders discussed the rise of local opposition, often referred to as nimbyism, and the importance of educating communities about the benefits of renewable energy development. Engaging elected officials and ensuring they hear both supportive and opposing views on projects were seen as essential strategies for gaining public support.

The roundtable highlighted the need for broader public education campaigns to inform communities about the importance of renewable energy and to build trust in the projects being proposed. This objective was satisfied by fostering collaboration between participating developers and regional stakeholders to promote transparency and trust in renewable energy initiatives.

**Objective 6: Aligning Renewable Energy Goals with Environmental Conservation Efforts**

Balancing renewable energy development with environmental conservation efforts was another key focus. The roundtable addressed the growing number of species being listed under endangered species regulations, which could potentially impede renewable energy projects. Stakeholders discussed strategies for navigating these regulatory hurdles while ensuring that development aligns with environmental protection goals.

Efforts to promote renewable energy while protecting sensitive species and habitats were highlighted as essential to achieving both conservation and energy development goals. Advocacy for a more balanced regulatory approach that considers both renewable energy needs and conservation priorities was identified as a way to move forward.

**Objective 7: Facilitating Policy and Legislative Reforms for Renewable Energy Expansion**

The final objective focused on facilitating policy and legislative reforms to accelerate renewable energy development. Stakeholders discussed the need for legislative support to streamline the approval process for renewable energy projects, particularly in relation to environmental regulations and the lengthy permitting processes.

The project underscored the importance of advocating for reforms that address delays in permitting and transmission development. Legislative efforts were discussed as crucial to ensuring that renewable energy projects can be completed on time and without unnecessary regulatory burdens. Stakeholders emphasized the need for ongoing collaboration to push for legislative reforms that align with the state's renewable energy goals.

**Conclusion and Next Steps.**

The SOLSTICE project made significant progress in addressing the seven specific aims outlined at the outset, particularly in overcoming infrastructure and regulatory barriers, promoting community engagement, and aligning environmental and energy goals. Moving forward, a second phase of this project, with additional funding, will focus on developing an actionable plan with specific products. These products will include detailed recommendations for legislative reforms, transmission enhancements, and community outreach strategies, ensuring that renewable energy development continues to advance in a sustainable and efficient manner.