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**A Conversation with ENGIE North America**

*Additional submitted attachment is included below.*

## Meeting Notes: ENGIE North America's Compass Battery Energy Storage System

October 22, 2024

Offices of Venture Strategic, Irvine California

On the following 5 pages are summary excerpts from a recent conversation with ENGIE North America regarding the Compass Energy Project. They are reported here as accurately as possible.

There are a few items of note I would share as we continue down the path of an almost adversarial debate regarding the merits of locating a 250MW facility so close to homes, schools, senior centers, and businesses.

These bullet points come from discussions over the last year:

- The leadership of Saddleback Church believes that they have an obligation to fund their local ministries, as well as those around the world. The sale of real estate to ENGIE North America would help in that cause.
- The leadership of Saddleback Church would point out that they too are members of the same neighborhood and would share any perceived risks. And they contend that as Christians, and members of the community, they would never knowingly put people at risk. They have been convinced in exhaustive detail that the risks in the contemporary designs of Lithium Battery Energy Storage Systems (BESS) has been mitigated.
- ENGIE North America is aware of the stigmas associated with BESS facilities and are committed to ensuring that the latest safeguards are in place to protect their investments, and the communities in which they are located. It is why they are committing to lithium iron phosphate (LFP) batteries over lithium ion. LFP batteries have reduced risk of thermal runaway; the flaming death throes of lithium battery facilities, spewing toxic smoke, injuring first responders, and evacuating whole communities.
- Companies like ENGIE North America, the California Energy Commission, politicians, regulatory agencies, cities and their citizens have every reason to eliminate the fire and environmental problems before installing gigawatts of capacity. Hydrocarbon burning peaker power plants cannot be eliminated if BESS facilities keep burning.

However, Saddleback Church only occasionally occupies their facilities, while we in the adjacent neighborhoods live and work here daily. Evacuating the Rancho Capistrano property would be an inconvenience. Evacuating our homes and schools for days on end would be devastating.

LFP batteries *reduces* the risk of fire, but not eliminate it. They still can and will burn, and the LFP electrolyte is lithium hexafluorophosphate (LiPF<sub>6</sub>).

LiPF<sub>6</sub> *likes* to burn and decompose into highly toxic and corrosive gases, the most dangerous being hydrogen fluoride. These are facts and changing to an iron cathode in LFP doesn't change the toxicity. It just reduces the chance of a thermal runaway.

## Meeting Notes: ENGIE North America's Compass Battery Energy Storage System

October 22, 2024

Offices of Venture Strategic, Irvine California

### In Attendance:

Paul McMillan, Development Director ENGIE North America

Renee Robin JD, Director, Permitting and Planning ENGIE North America

Tim Lineberger JD, Vice President, Venture Strategic

Michael McGrady, President, Hidden Creek Homeowners Association

The purpose of the meeting was to gain additional clarification and insight into the purpose, strategies, and methodologies involved in ENGIE North America's (ENGIE) Opt-In Application with the California Energy Commission (CEC), and for ENGIE to be able to educate, not persuade, this homeowner representative in an environment of open, thoughtful dialogue and debate. This report is not meant to persuade or promote any position, but rather is a summary of some of the discussions which took place. Also, more was discussed in greater detail than space will provide here: the application process, site operations and standard operating procedures, the technology itself, and monitoring and fire prevention.

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The meeting started with a brief overview of the project, but because all parties were aware of the intricacies of each other's positions, and of the project itself, diving into the details took place almost immediately.

***Why here, why not anywhere else? California has over 25,500 miles of transmission lines with nearly 240,000 miles of distribution lines, of which 150,000 miles are overhead. How in-depth did ENGIE search for an alternative site not so close to homes, schools, waterways, transportation corridors, etc.? Why not find a spot in the desert, or even in the San Juan Capistrano landfill?***

The issue distills down to *load pockets* and *transmission lines*. A load pocket is a small area of the electric grid with limited ability to import electricity because of the high concentration of demand, or insufficient transmission capabilities, or because of transmission congestion, it is unable to provide power without additional local electric generating capacity.

The three most notorious load pockets in the United States are New York City, San Francisco, and San Diego. SDG&E anticipates demand to double by 2045, as such, the company feels compelled to find alternative solutions.

Transmission congestion and load pockets are similar to the nation's roads and highways. All roads are certainly connected. It's possible to leave from a driveway in Prineville, Oregon and drive into a parking lot in San Diego, California, but the "transmission congestion" through Los Angeles, with so many local "consumers" on the road, our interstate driver becomes severely bogged down. SDG&E does import some power from elsewhere, but with peak demand and the anticipated 100% demand increase, they are looking at BESS as one of the solutions.

***But what about building it at the San Juan Capistrano landfill?***

This question comes down to the construction/routing of transmission lines. ENGIE has invested several million dollars in the project so far, including a 2-year interconnectivity study as required by the CAISO (CA Independent System Operator). It is not just a question of plugging it in anywhere.

It's been said that "infrastructure is ugly." Transmission lines would have to be built in an attempt to route from the landfill to suitable grid lines with enough capacity, and the project would face the same hurdles or more. The San Juan Capistrano Valley location is a unique spot on the grid capable of absorbing 100% of the project's energy. It is one of the few suitable places for development in southern Orange County, and it is possible to utilize existing SDG&E lines while avoiding new and unsightly transmission projects.

***The project business unit is called "Compass Energy Storage LLC" (Limited Liability Corporation). We suppose at minimum you created the LLC to avoid any liability getting to the ENGIE parent company, or perhaps it is to provide for the ability to flip the Compass project to a new owner, are we wrong?***

A Limited Liability Corporation (LLC) does not afford the type of shielding they once did. In tort law in California, it has become easy to pierce the LLC veil. Instead, the LLC needed to be created because study and application expenses, sales taxes from purchasing equipment, tax credits, operating costs, etc., must land somewhere, based upon locality, in order to track unit performance

It is legitimate to wonder about the project being flipped multiple times starting in the near future, passed along to some unknown entity. That was actually the case under the former Broad Reach Power organization. However, ENGIE North America is broken down into five separate business units (SBU):

- |                            |                                 |
|----------------------------|---------------------------------|
| Renewables                 | Energy Solutions                |
| Networks                   | Global Energy Management Supply |
| Flexible Energy Generation |                                 |

The Compass LLC unit is part of Flexible Energy Generation SBU, committed to energy production. ENGIE considers energy production as core to their business, and they intend to build and own these facilities.

***Where are the Tesla Megapack 2XLs going to be produced/sourced? You know Duke Energy is removing Chinese battery giant CATL from Lejeune Marine Corps Base. Are these going to be produced at Tesla's new Shanghai, China facility? What about CCP involvement in software and battery management systems?***

Certainly, they could come from the Tesla new Shanghai facility that comes online in 2025, but there is a lot going on right now regarding tariffs and “locally sourced” equipment on such projects. Are internationally sourced materials, with the finished product assembled in the United States, “locally sourced?” The elections are going to further change the tariff conditions. Right now, Tesla’s Lathrop, California facility looks like the most likely source for the Megapacks. But that said, ENGIE has said that they share our concerns and that they will remain diligent in their duty to protect the American consumer from covert power system sabotage and manipulation.

***About Battery Management Systems (BMS) – Whose BMS are you planning to use?***

Tesla has their own BMS, but ENGIE will layer on top of that system with an ENGIE battery management system, adding a more sophisticated level of monitoring and control. All of which will report to a central station and be simultaneously available 24/7 to the site manager, who will have direct responsibility for the facility. The ENGIE BMS allows them to also layer on additional safety features and monitoring that the manufacturer’s BMS does not provide. Such as the air quality monitoring sensors they plan to install at the Compass location.

***We have heard that Lithium Iron Phosphate (LFP) batteries are generally considered better than lithium-ion batteries for safety and environmental reasons; that LFPs are more stable and less likely to overheat or catch fire than lithium-ion batteries.***

***Why then in the application, appearing in Section 1 Project Description, 1.2 Project Description; Section 2 Project Description, 2.1 Overview and Location; and Section 2.2 Project Components, do you say, “Lithium-iron phosphate, or similar technology?”***

***It would seem that the inclusion of the words, “or similar technology,” allows for a perfect opportunity to reverse course and install lithium-ion batteries without violating the terms of the application. Can you explain this?”***

ENGIE thought they had removed all references to “similar technology” from the application; they will have to follow up with us on that. Their objective with the words, “similar technology” was simply a commercial one. There are a limited number of qualified manufacturers of commercial LFP battery systems, and they were trying to telegraph to them that they have options, that they are not shoe-ins for the project. They will get back with us on that issue. ENGIE is committed to LFP technology, even if the manufacturer changes.

***We have heard that, because of cooling equipment and other components, this 250MW facility will be emitting 100dBA noise 24 hours a day, seven days a week (equivalent to the noise produced by a jackhammer 1 meter away). Is there truth to this, and if not, what will be the actual dBA we should be expecting?***

In Section 4.7 of ENGIE's application to the CEC, a detailed noise analysis is provided that explains the amount of dBA from the project construction and operation at the source, and at key sensitive receptors --such as residences to the east and south as well as Saddleback Church. The project dBA will be below the baseline noise in the vicinity, and below all city ordinance levels. (In the range of 41 to 23 dBA at the nearest sensitive receptor).

The CEC will be considering sound in their review and the Environmental Impact Report will include this. The cooling equipment is simply an air conditioning unit. There will be inverters to convert the DC electricity output of the batteries to AC electricity. Solar PV systems operate the same way. Transformers will match the AC electricity to the voltage of the existing transmission line. Transformers are everywhere in neighborhoods up on distribution poles, in green boxes along the street, and in local substations which often share property lines with residential properties.

***There is language at the CEC that speaks to the decommissioning of the project. It reads like a remediation plan, can we expect that plan to be executed at the end of the useful life of the first Tesla Megapack 2XLs (15-20 years), and that you will be decommissioning and dismantling the site?***

All projects of this type require a Decommissioning Plan which provides for mitigation measures for site restoration upon the decommissioning of the plant. It names responsible parties and bonding to protect local agencies (and citizens) from having to cover the cost or endure responsibility. Given the current projections for energy demand growth in California, they expect the grid will still need this asset in 15-20 years. Therefore, they expect *NOT* to decommission this project when the first batteries reach the end of their useful life. They will recycle the batteries with the manufacturer and "repower" the system, that is, install the latest battery technology to replace the aging components.

***What is Saddleback Church's role in all this? How are they financially participating?***

ENGIE has a purchase agreement to buy 41 acres from Saddleback Church, which will allow for ENGIE to install the BESS campus and associated equipment. The system and site is designed for a 250MW system on 13 of those acres and it is not expandable. The purchase agreement with Saddleback is strictly a contractual real estate agreement, and the terms are confidential. ENGIE has options to extend the agreement. And while some opponents have suggested delaying the project to the point their real estate option expires, in that case ENGIE would just execute their

option to buy. Even though some opponents have asked them to, Saddleback Church cannot back out of the transaction without severe penalties and liquidated damages.

***What is the timeline for completing the Opt-In application with the CEC, is there a deadline for completing it?***

The CEC and the applicant have a process by which the applicant submits information, and the CEC provides a formal response. This exchange can go back and forth multiple times (sometimes up to six exchanges of questions and answers). Based upon what they know today, ENGIE would say that these exchanges will be completed by the end of the year.

***Is that when the CEC’s 270-day clock starts for public input?*** If at the end of the year the CEC has reviewed the application and deemed it complete, that initiates a 270-day certification process. This process requires public meetings, where community members, local governments, and California Native American tribes can learn more about the project, understand the certification process, and express any concerns regarding potential environmental impacts. However, ENGIE plans to get out in front of the public well before the start of the CEC 270-day window. They have said that they want people to understand the facts regarding this BESS facility and to make themselves available to hear firsthand their thoughts and concerns.

***There is local history and knowledge regarding the property, including public awareness of past construction challenges because of the soil, landslides, and the condition of the alluvial plain the BESS facility would sit upon. How can you even suggest building such a volatile commercial project on unstable soil?***

ENGIE has said they intend to be transparent in this process, which is why they ask independent 3rd party inspectors, companies, and engineers, along with over 12 public agencies (part of CEC process), to review every aspect of the project. Regarding the property itself, extensive analysis/studies have been conducted by some of these 3rd parties and public agencies, available on the CEC docket, which includes:

- |                                       |                              |
|---------------------------------------|------------------------------|
| Phase I Environmental Site Assessment | Waste Management             |
| Stormwater Management Plan            | Land Use                     |
| Water Quality Management Plan         | Emissions Calculations       |
| Detailed Health Risk Assessment       | Ambient Air Quality Analysis |
| Emissions Calculations                | With many others available   |

Regarding our specific question, there is a 3-part Geotechnical Evaluation Report also in the CEC docket that details the extensive testing that has been conducted by civil engineers who focus their studies on the behavior of soil and rock. ENGIE again emphasized that they want to be as transparent as possible.