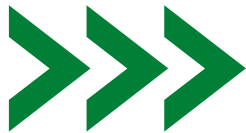




Tomorrow's Battery Today

Vol. 2 Newsletter



CRCES™ technology “Tomorrow’s Battery Today Newsletter Volume 2” takes up where Newsletter Volume 1 left off

INTRODUCTION

The CRCES™ team would like to thank all the customers and associates that have provided great feedback, as well as insightful questions. In this newsletter we will update the categories of work that have been proceeding for CRCES™.

Over the last month, more and more domestic and foreign renewable energy companies have been addressing long duration energy storage. It is becoming the hot new topic, and it is one of the strengths of CRCES™ technology. In today’s Volume 2 newsletter we will address the following:

- Long duration energy storage with CRCES™ technology
- Competing technology for electrical energy storage
- Current and future performance levels of CRCES™ technology
- The purpose of private equity in CRCES™ technology
- De-risking CRCES™ technology

Long Duration Energy Storage with CRCES™

CRCES™ technology supports a very low energy storage degradation rate, as low as 1% - 2% per month based on location and certain applications. This, combined with little degradation due to dispatch rate, means that you can hold energy long-term with CRCES™ technology spaces. Further, it can distribute energy over a long period of time and not experience a reduction in the total available energy. Over even shorter time periods, batteries and many technologies experience significant loss of available energy or additional cost.

CRCES™ technology, compared to lithium-ion batteries for long duration of storage or distribution, is a big winner.

CURRENT AND FUTURE PERFORMANCE LEVELS OF CRCES™ TECHNOLOGY

The CRCES™ performance levels utilized in our newsletter Volume 1 example are significantly below the calculated performance levels that CRCES™ technology is capable of achieving. In the coming months, AT&V will fine tune these applications and will showcase improved performance. This, combined with improvements under development, will show significant efficiency gains for CRCES™ technology. In many examples, CRCES™ technology can outperform photovoltaic, PV, and batteries, while in the future CRCES™, technology may approach levels realized by only the most elite energy storage systems.

The first improvements to CRCES™ performance levels should be presented in 4-6 weeks.

THE PURPOSE OF PRIVATE EQUITY IN CRCES™ TECHNOLOGY

The purpose of private equity teaming with CRCES™ technology is for human capital and marketing to expedite rollout outside of North America.

AT&V is well underway in rolling out the technology in North America, Central America, and the Caribbean; however, roll out in Europe, India, the Middle East, Australia, and some other target markets will require support beyond AT&V's current team. This support will also speed up and expand the capacity to deliver the technology in the global market.

DE-RISKING CRCES™ TECHNOLOGY

AT&V has performed engineering for over a year to prove the CRCES™ technology and ensure its viability and uniqueness for domestic, and foreign patents. Although AT&V has filed patents in the U.S., foreign patents are still being developed and it will take time before they are complete. In the interim, AT&V is working with customers to execute dynamic NDAs and provide surety of the technology.

To de-risk and help customers appreciate the CRCES™ technology, AT&V is performing the following:

- Having a 3rd party engineering firm independently run the technology in their own models and certify its validity along with performance guidelines.
- Disclosing to customers under an NDA a general description of the technology along with information about the steps that have been taken to calculate performance levels.
- Incorporating information from our patent attorneys to add credence to the validity of the patent process.
- Providing performance guarantees in each contract.

If your company has an application you would like to address, AT&V will go through the this process to gain your level of confidence. In closing, it is important to look at AT&V's body of work with new technology over the last (30) years and how those technologies have been monetized, as well as their level of performance. AT&V has never had a technology that infringed on other technologies or ever had a technology that did not perform to the guaranteed levels during implementation and/or over its lifetime.

COMPETING TECHNOLOGY FOR ELECTRICAL ENERGY STORAGE (EES)

The CRCES™ team has no problem acknowledging and comparing energy storage technologies with competitors. In fact, AT&V supports many types of clean energy storage such as Molten Salt tanks, thermal storage, air separation, air compression, as well as penstocks for elevated hydro projects. AT&V is always looking for the right solution that fits our customer's needs. One competitor is utilizing liquefaction of air and storing it at cryogenic temperatures. The feedstock, air combined with electricity, is a proven application and supported by AT&V's traditional product line. However; CRCES™ technology has a lower CAPEX and OPEX. The carbon footprint of CRCES™ technology is very similar and easier to run than an air separation plant. It is our hope that we can bid projects and that the best technology fit will win the project.

FOR MORE INFORMATION

If you would like more details or have your own questions, please feel free to email green@at-v.com. Additional information on CRCES™ technology is available on AT&V's website at www.at-v.com. Select Carbon Reduction or select News & Media, then Publications. Thank you in advance for taking the time to read this newsletter and please forward us any questions you would like us to answer and expand on.