



**Energy Assurance utilizes an extensive knowledge of batteries and testing to provide the battery industry with a comprehensive, forward-looking and responsive testing resource.**

## Capabilities

Energy Assurance offers a full range of testing and certification capabilities. We have achieved accreditations to ISO/IEC 17025:2005, include ACLASS, UL Certificated Agent, TUV Certification After Recognition of Agent Testing (CARAT) as well as CB Test Laboratory certification. As a full service battery test lab, we offer the following testing services:

### Safety and Transport Testing:

- UN 38.3 *Recommendations on the Transport of Dangerous Goods – UN Manual of Tests and Criteria, 5<sup>th</sup> Revised Edition, Amendment 1.*
- IEC 62133 *Secondary cells and batteries containing alkaline and other non-alkaline-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications*
- UL 1642 *Standard For Safety of Lithium-ion Batteries*
- UL 2054 *Standard for Safety of Commercial and Household Batteries*
- IEC 60086-4 *Primary batteries – Part 4: Safety of lithium batteries*
- IEC 62281 *Safety of primary and secondary lithium cells and batteries during transport*

### Performance:

- IEC 61960 *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for portable applications*
- ANSI C18.1M *Portable Cells and Batteries with Aqueous Electrolyte*
- ANSI C18.2M *Portable Rechargeable Cells and Batteries*

- IEC 60086-2 *Primary Batteries – Part 2: Physical and electrical specifications*
- IEC 60086-3 *Primary Batteries – Part 3: Watch Batteries*

### Individual Test Capabilities:

- Cell and battery cycle life testing
- Cell and battery capacity checks
- High rate discharge performance
- Temperature cycling
- Storage at temperature
- High and low temperature performance
- Oven exposure, heating
- Short circuit at room and elevated temperature
- Overcharge and overvoltage testing
- Low pressure/altitude simulation
- Vibration (slip table)
- Forced discharge
- Impact and drop/free fall to various surfaces

### Other Service Offerings:

- Compliance planning
- Test regime development
- Product validation support





**About Us:**

Energy Assurance utilizes an extensive knowledge of batteries and testing to provide the battery industry with a comprehensive, forward-looking and responsive testing resource to help clients mitigate risk.

We strive to establish a long term relationship with our customers by offering industry specific advice to assure our cell and battery manufacturing customers are able to deliver products into their markets on time and performing properly. A large part of this is our focus on working with our customers to mitigate risks as early in the design process as possible. This is done by developing an up-front understanding of the standards and requirements that their product will be subjected to - including design impact and failure criteria. The rapport we establish with our customers is what sets Energy Assurance apart from most testing services facilities.

**Contact:**

Cindy Millsaps  
President and CEO

Energy Assurance, LLC  
5202 Belle Wood Court  
Suite 106  
Buford, Georgia 30518

(30 Miles Northeast of  
Atlanta, Georgia)

404-954-2054

[CindyMillsaps@Energy-  
Assurance.com](mailto:CindyMillsaps@Energy-Assurance.com)

**Visit our website**  
[www.Energy-Assurance.com](http://www.Energy-Assurance.com)



**TÜV SÜD America Partnership:**

Energy Assurance LLC is pleased to be partnered with TÜV SÜD America as a full service test house for the testing of small format batteries in the United States. The Energy Assurance/TÜV SÜD America partnership combines the unique strengths of each organization to provide battery manufacturers with expert technical resources and compliance solutions designed to meet the demanding requirements of the battery-powered product industry.

All work performed by Energy Assurance in cooperation with TÜV SÜD America is recognized under their CARAT program and allows us to offer our customers Third Party Certification services. These certification services will provide customers with the ability to obtain a TÜV SÜD America Mark on their products to commonly required US safety standards (UL 2054 and UL 1642), international standards (IEC 62133 and IEC 62281) and transportation standards (UN 38.3).

