



COLUMBIA TECH™

Time to Market at *WARP SPEED*

Flexibility, Integrity, and Trust
for More Than 130 Years

SunCell Product Development

For Brilliant Light Power Industry Day

October 26, 2016

Company Overview



Profile

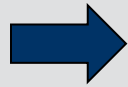
- Privately Held Since 1885
- Annual Sales: ~ \$200 Million
- Caring Associates: ~ 500
- Divisions: Columbia Tech, CogmediX
- Space: ~ 300,000 SF
 - 6 Facilities including Multiple Clean Rooms

Core Strengths

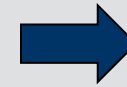
- Accelerating time to market
- Reducing product cost
- Supply chain selection and management
- Successfully transitioning programs
- Intellectual property protection
- Positioning new products for successful scalable launch
- **Ensuring you never miss a market opportunity**

Concept to Commercialization

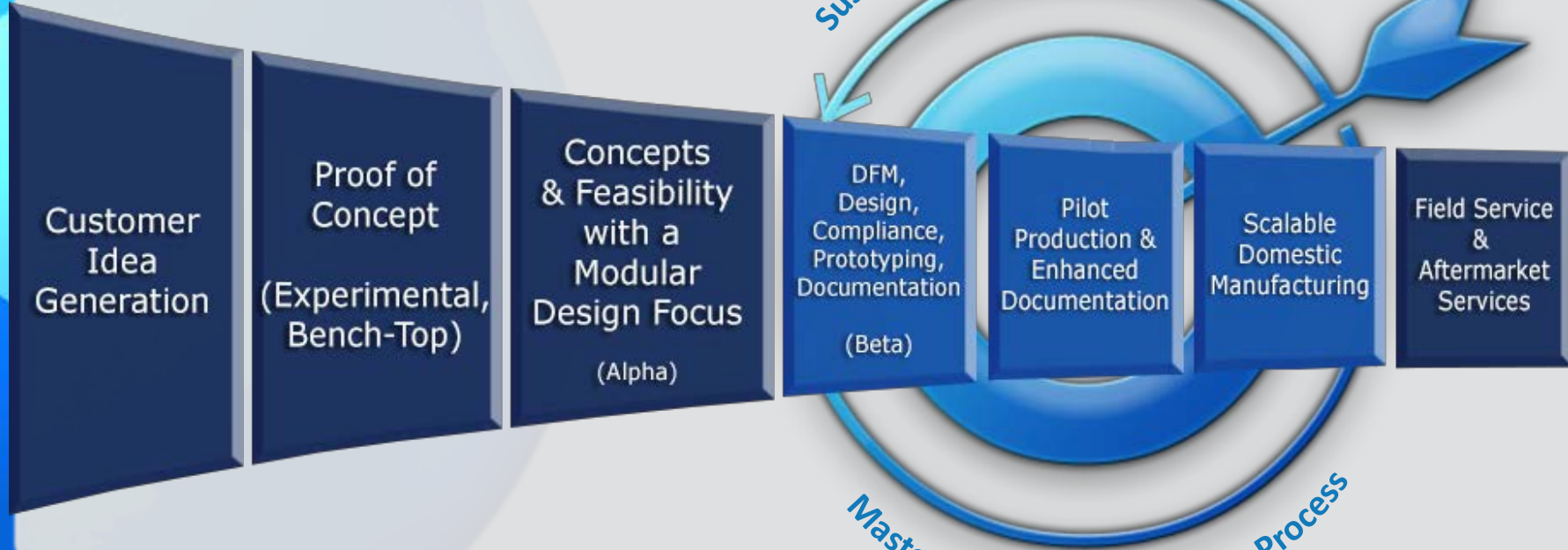
Product Development



Design for Manufacturability



Scalable Launch



Certifications/Registrations



Total Compliance Adherence



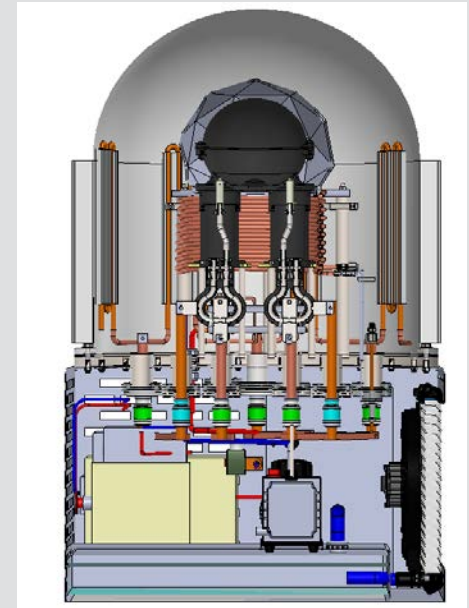
Coghlin Companies as a Partner

- Culture of high ethical standards
- Creative solutions to challenging problems
- Breadth of experience enabling cross-pollination of ideas across technologies and industry sectors, thus reducing costs
- Proven team of mechanical, electrical, software and manufacturing engineers augmented by external partners
- Rapid prototyping thru full scaled production to transforming innovative designs into commercialized, reliable products
- History of philanthropy supporting local, regional and national health, education and social service organizations
- Reliable, Responsive, Flexible, Referable

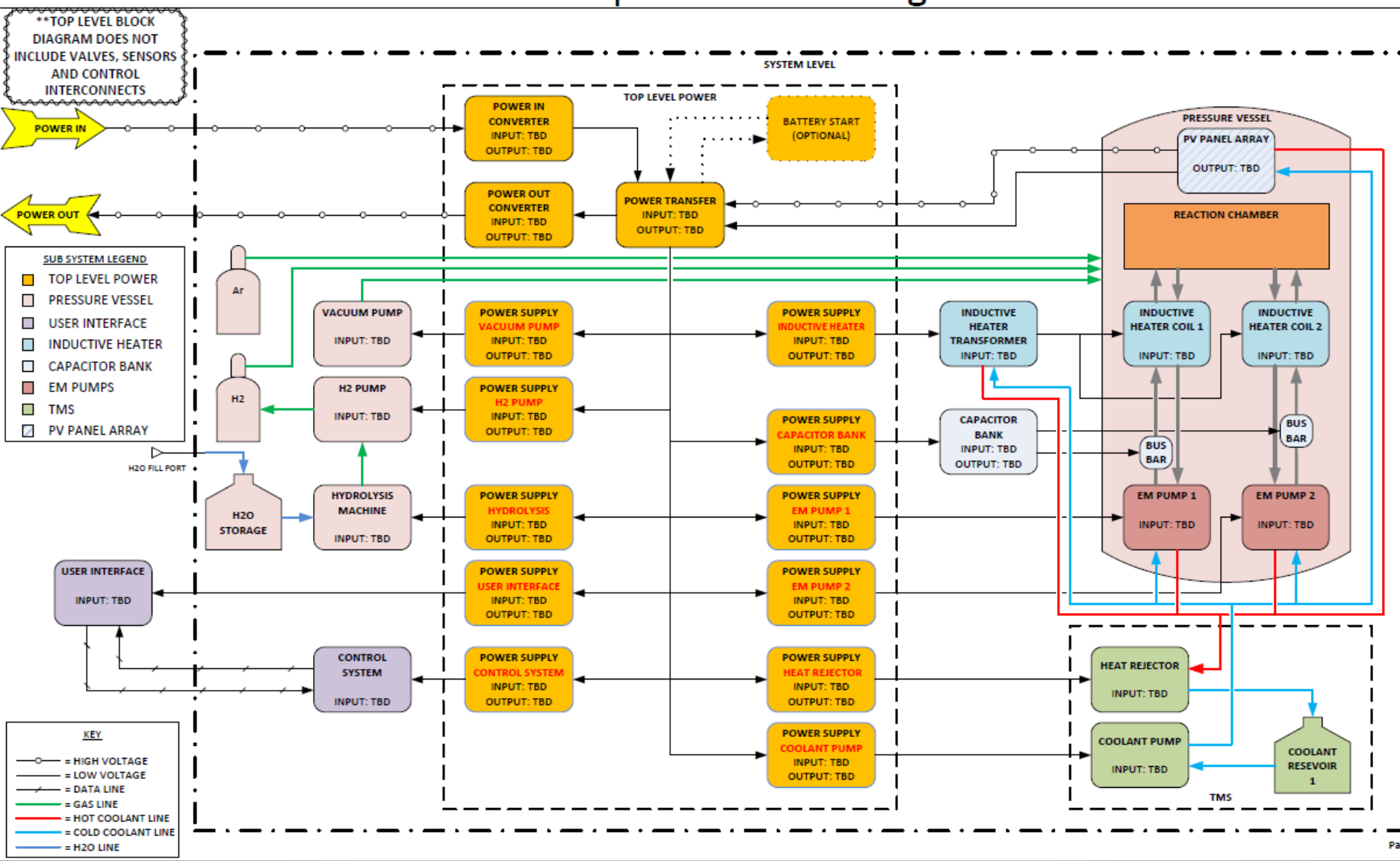


SunCell Product Development

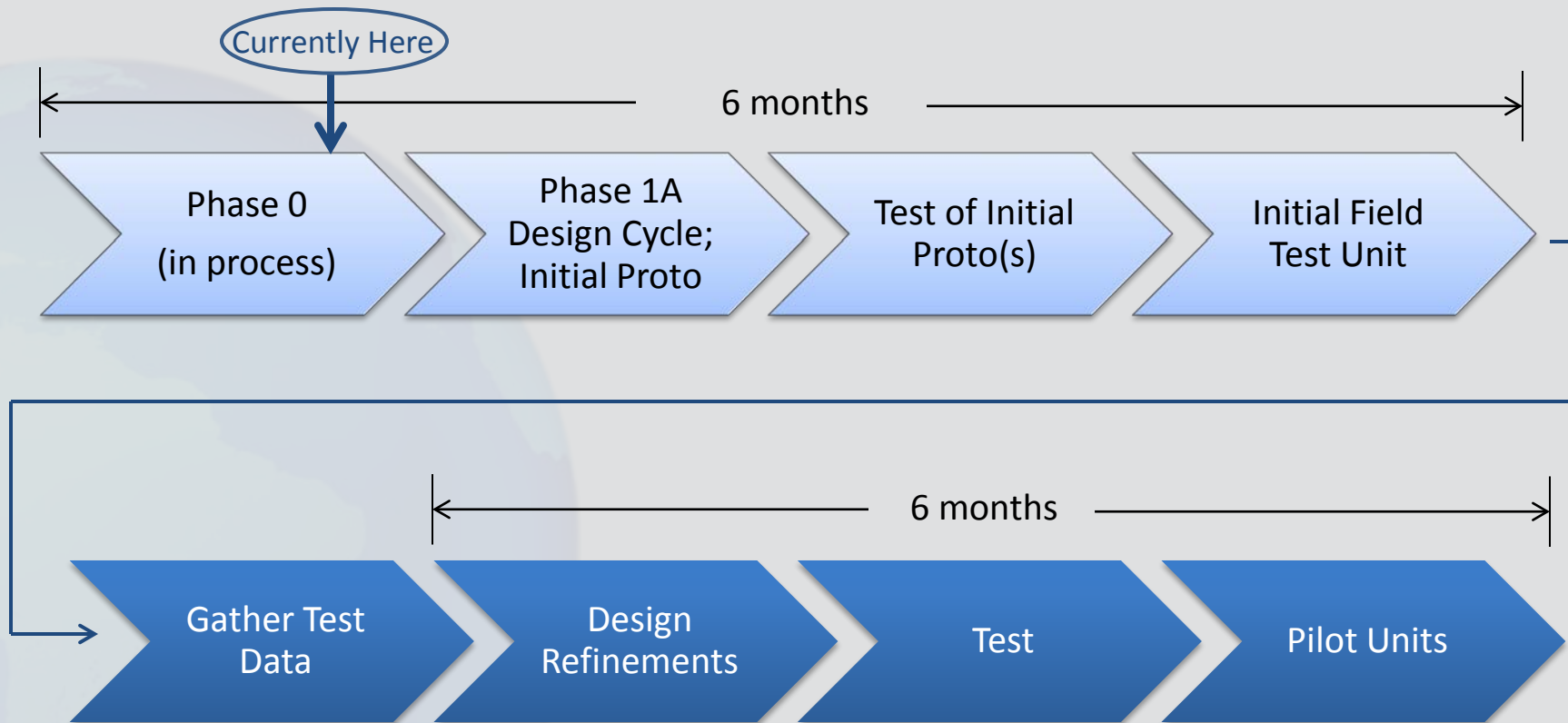
- Columbia Tech Engineering has begun work with the Brilliant Light Power team to integrate the SunCell core technology into a fully packaged operational prototype.
- Engineering challenges will include thermal management, sealing and material selection.
- CT will also develop the control system for the Sun Cell assembly.
- A phased development cycle and product release will be executed.
- We are currently engaged in a Phase 0 Concept and Feasibility. Target start for Phase 1A Detail Design is November 1st, subject to final Phase 0 deliverables and approved funding.
- A small number of initial prototypes will be ready for field testing in friendly installations for stationary applications in approximately 6 months.
- Pilot units will be available 6 months after the initial field test units.



System Level Block Diagram



SunCell Product Development





COGHLIN COMPANIES INC

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**Your Success is
Our Passion**