



Battery Project Name

Statement of Work

1. Scope

This document details the Statement of Work for development and production of xxxx cell.

Vendor will carry out feasibility study cell development, production preparation and qualification tests in 3 phases.

- Phase 1 - Feasibility Study
- Phase 2 - Full Scale Development cells
- Phase 3 - Production Line – Preparation and Qualification

The following paragraphs define the various activities as part of the lithium cells project.

2. Cells specifications

The cells to be developed, shall comply with the technical requirements as detailed in separate attach document.

3. Program Milestones and Deliverable

Vendor anticipates the following program milestones for the supply of the xxxx cells

ARO – after receipt of order

Data sheet – will include but not be limited too, all the requirements detailed in
Technical Requirements document.

#	Milestone	Deliverable	Delivery date (weeks ARO)
1.	Phase 1 – feasibility study		
1.1.	Define exact discharge regime (based on Customer specification and ATP requirements)		
1.2.	Define raw materials, define cathode & anode processes	Preliminary BOM, drawings and process specifications	
1.3.	Build and test small number of test cells	Preliminary discharge curves. Preliminary cell data sheet	9
1.4.	Recommendation for phase 2 and 3	Phase 1 report (*)	9
1.5.	Review time table for phases 2 and 3	Phase 1 report (*)	9
1.6.	Review cost estimate	Phase 1 report (*)	9

#	Milestone	Deliverable	Delivery date (weeks ARO)
1.7.	Design review, with customer	Minutes of design review	11
1.8.	Monthly development progress report	Shall be sent to customer till 5 th of each month and: shall cover progress done in the previous month; open issues	
2.	Phase 2 – full scale development cells		
2.1.	Optimize cell performance		
2.2.	Finalize design (dimensions, components)	Update preliminary BOM, drawings	
2.3.	Evaluate manufacturability of components and cells. Investigate & evaluate production processes.	Update preliminary process specifications	
2.4.	Manufacture cells and perform vendor pre-qualification electrical tests	vendor pre-qualification electrical test results report including final cell data sheet	18
2.5.	Manufacture cells and perform vendor pre-qualification safety tests	vendor pre-qualification safety tests results report Recommend <u>external</u> to the cell fuse/no fuse based on short circuit results	18
2.6.	Manufacture 200 cells and Perform with customer the ATP	ATP results report	22
2.7.	Recommendation for phase 3	Phase 2 report (**)	23
2.8.	Review time table for phase 3	Phase 2 report (**)	23
2.9.	Review cost estimate	Phase 2 report (**)	23
2.10.	Design review, with customer at vendor facility	Minutes of design review	23
2.11.	Build and delivered to customer prototype cells	200 prototype cells	27

#	Milestone	Deliverable	Delivery date (weeks ARO)
2.12.	Monthly development progress report	Shall be sent to customer till 5 th of each month and: shall cover progress done in the previous month; open issues	
3.	Phase 3 – production line – preparation and qualification		
3.1.	Complete (release) BOM, all production drawings & process specifications and procedures including production quality assurance	Final documentation package – BOM, drawings, process specifications	
3.2.	Design, acquire and set- up all production tooling and equipment		
3.3.	Quality production tooling, equipment and processes		
3.4.	Develop & release work instructions and train assembly operators		
3.5.	Manufacturer cells and Perform vendor qualification testing	vendor qualification test results report	47
3.6.	Manufacturer 50 cells and Perform with customer, ATP tests	ATP results report	52
3.7.	Manufacturer and Perform UN transportation tests	UN transportation tests results report	53
3.8.	Manufacturer and Perform UL tests	UL Certification	
3.9.	Plan build schedule for TBD cells and review cells costs	Quotation for TBD cells	54
3.10.	Program final report	List of all the data documentations to be submitted to customer at the end of the project. Phase 3 report (***)	54
3.11.	Final design review, with customer at vendor facility	Minutes of design review	54

#	Milestone	Deliverable	Delivery date (weeks ARO)
3.12.	Monthly development progress report	Shall be sent to customer till 5 th of each month and: shall cover progress done in the previous month; open issues	

X – add date by vendor

(*) – Phase 1 report will include the following subjects:

1. Summary of the activities carried out during phase 1.
2. Detailed report of engineering studies and tests results including Preliminary BOM, drawings and process specifications, Preliminary discharge curves. Preliminary cell data sheet.
3. Technical summary of the feasibility study and conclusions achieved concerning further development and production of the cells.
4. Recommendations for phase 2 and 3, timetable for phase 2 and 3, review cost estimate.

(**) – Phase 2 report will include the following subjects:

1. Summary of the activities carried out during phase 2.
2. Detailed report of engineering studies and tests results including update Preliminary BOM, update drawings and process specifications, final cell data sheet, recommendations fuse/no fuse.
3. Technical summary of the full-scale development cells and conclusions achieved concerning further development and production of the cells.
4. Recommendations for phase 3, Vendor pre-qualification electrical test results report including final cell data sheet, vendor pre-qualification safety tests results report Recommend fuse/no fuse based on short circuit results, ATP results report, timetable for phase 3, review cost estimate.

(***) – Phase 3 report will include the following subjects:

1. Summary of the activities carried out during phase 3 including a statement that all the development activities and production preparation activities have been successfully completed..
2. List of all the data documentations to be submitted to customer at the end of the project.
3. Detailed report of engineering studies and tests results including Final documentation package – BOM, drawings, process specifications

4. Vendor qualification electrical test results report, ATP results report, UN & UL tests results report. results report, Quotation for TBD cells.

4. Acceptance Tests

Acceptance tests shall be carried out in the following phases:

- a) Acceptance tests at Phase 2 of the Full Scale Development (FSD) models (50 ea.). Successful completion of these tests is conditional for continuation of the program and manufacturing of the pre-production cells.
- b) Acceptance tests at Phase 3 of the pre-production cells (quantity 50). Successful completion of these tests is conditional for continuation of the program and manufacturing of the pre-production cells.
- c) Acceptance tests of the series production cells.

The acceptance tests shall include the following topics in accordance with the various types of acceptance:

- Review of engineering drawings
- Physical and mechanical and visual inspection
- Electrical tests
- Environmental tests
- Safety tests

Acceptance tests checklist shall be approved by both sides prior to signing of the order.

Customer representatives shall be present at the tests. The Contractor shall notify and coordinate the date of the tests with the customer.

The Vendor shall make available all the manpower, tools, instruments and laboratory space required for carrying out the tests.

Test results shall be signed by the Contractor and approved by the customer.

5. Quality Assurance

All activities related to the project will be controlled and approved by Q.A.