IMCA QUICKFIRE 2023

Designed4Validation

ONESTEP POWER

ONESTEP POWER SOLUTIONS

Sarah Whiteford
Founding Director

OneStep Power Solutions develops and **provides safe, minimally invasive electrical testing** for robust power systems.

Our mission is to provide the best testing & engineering solutions to verify the reliability of power systems, in a **ROBUST, RELIABLE, & REPEATABLE** way.

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COMPREHENSIVE TESTING

Example: testing regime for Closed Bus

1. *Protection setting audit (inc. version control)*
2. *Fuelling Testing*
3. *Excitation Testing*
4. *Over-Voltage Testing*
5. *Earth Fault Testing*
6. *Relay & Protective Device Testing*
7. *Current Sensing Testing*
8. *Load application & Rejection Testing*
9. *Phase Failure Testing*
10. *Blackout Recovery Testing*
11. *Harmonic Distortion Testing*
12. *Fault Ride Through Testing*

Image by David Mark from Pixabay

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Providing repeatable and rapid power system assurance for life.

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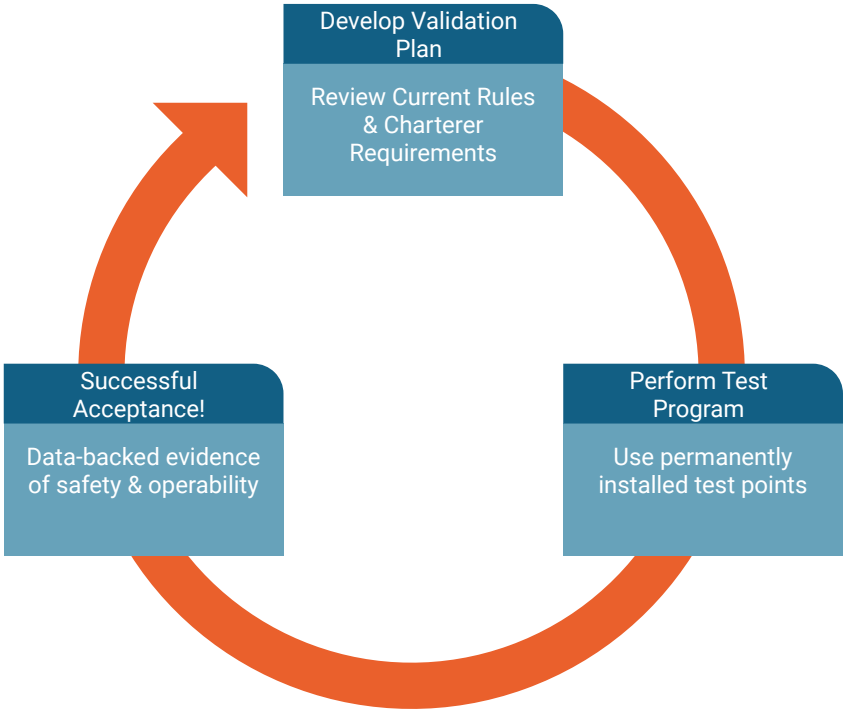
LIFECYCLE CONCEPT



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CONNECTION HARDWARE

Permanently install connection points onboard

Validation Company uses paired test plugs to connect test devices

GVRT

Maintain Redundancy Concept	✔
Recognized Brands, used in onshore substations	✔
No additional failure point	✔
Easily Retrofit	✔

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INCREASED SAFETY AND SPEED

Test Points permanently installed offer increased safety:

- CT Connections: Make before break
- Control Circuits: Break before make

✓ Simplifies installation of test equipment into operational circuits
✓ Reduces risk of connecting equipment incorrectly
✓ Reduces isolation requirements
✓ Reduces risk of incorrect system reinstatement after testing
✓ Faster connection & disconnection
✓ No opportunity for inadvertent testing during operations

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REPLACES BUILT IN TEST EQUIPMENT

	D4V	BITE
Rapid testing	✔	✔
Data-driven evidence	✔	✔
Low lifetime cost	✔	✔
No changes to protection settings	✔	✔
No built-in failure points	✔	✖
OEM and validator independant	✔	✖
Offsite calibration	✔	✖
New tests can be added	✔	✖
Test any time	✖	✔

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POWER SYSTEM TESTING
ROBUST RELIABLE REPEATABLE