Standard RE/FiT Telemetry Pre-commissioning Report (Sample)

1. Applicant should provide a schematic and wiring diagrams for injection test with indication of signal interfacing point.
2. Applicant should confirm that the analog signal is come from Direct Digital Controller (DDC) instead of CT.
3. Applicant should provide the telemetry results (see below example & text in red) and photos (for required analog signals in kW, kVar, Amp & kV, and digital signals in circuit breaker status, etc.).
   a. Secondary Injection test at DDC (e.g. analog signal error ≤ ± 1% or ≤ ± 0.1mA):

Secondary Injection Point	Equivalent Inject Power	Output Signal limit at interfacing point (a)	Actual Signal measured at interfacing point (b)	error = (b-a)/a*100% or error = (b-a)	Remarks (error ≤ ± 1% or ≤ ± 0.1mA)
Supply Point^ (Export Power to CLP)	+ 1500kW#	+ 10mA	+ 10.1mA	1% or 0.1mA	Pass ~~or Fail~~
Supply Point^ (Import Power from CLP)	- 1500kW#	- 10mA	- 10.1mA	1% or 0.1mA	Pass ~~or Fail~~
RE Outlet (Generation)	+ 750kVar#	+ 10mA	+ 10.1mA	1% or 0.1mA	Pass ~~or Fail~~
RE Outlet (Generation)	- 750kVar#	- 10mA	- 10.1mA	1% or 0.1mA	Pass ~~or Fail~~
RE Outlet (Generation)	+ 500kW##	+ 3.33mA	+ 3.4mA	2.1% or 0.07mA	Pass ~~or Fail~~
RE Outlet (Generation)	- 500kW##	- 3.33mA	- 3.4mA	2.1% or -0.07mA	Pass ~~or Fail~~
RE Outlet (No generation)	0kW	0mA	0.1mA	N/A or 0.1mA	Pass ~~or Fail~~

   b. Real time generation (e.g. analog signal error ≤ ± 4% or ≤ ± 0.4mA):

Real Time Generation	Actual RE output	Output Signal limit at interfacing point (a)	Actual Signal measured at interfacing point (b)	error = (b-a)/a*100% or error = (b-a)	Remarks (error ≤ ± 4% or ≤ ± 0.4mA)
RE Outlet (Generation)	100kW	0.67mA	0.77mA	15% or 0.1mA	Pass ~~or Fail~~
RE Outlet (Generation)	10kVar	0.133mA	0.153mA	15% or 0.02mA	Pass ~~or Fail~~

4. End-to-End checking with CLP in accordance with Item 3 (After connecting the telemetry circuit to CLP side and completing FiT meter installation, e.g. analog signal error ≤ ± 5% of power range or ±0.5mA, assuming 1% or ± 0.1mA error at CLP side).
   - Real time generation (error ≤ ±5% of power range or ±0.5mA): Check RE output with CLP's System Operation telemetry reading

Remarks:
^ Telemetry signal is required at Supply Point if RE generation capacity > local demand
# Inject Power is in accordance with power export/import limit (standard transducer characteristics: ±1500kW corresponds to ±10mA and ±750kVar corresponds to ±10mA)
Inject Power is in accordance with RE capacity, i.e. 500kW in this example (standard transducer characteristics: ±1500kW corresponds to ±10mA)

Standard RE/FiT Telemetry Pre-commissioning Report Template

1. Applicant should provide a schematic and wiring diagrams for injection test with indication of signal interfacing point.
2. Applicant should confirm that the analog signal is come from Direct Digital Controller (DDC) instead of CT.
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Secondary Injection Point	Equivalent Inject Power	Output Signal limit at interfacing point (a)	Actual Signal measured at interfacing point (b)	error = (b-a)/a*100% or error = (b-a)	Remarks (error ≤ ± 1% or ≤ ± 0.1mA)
Supply Point^ (Export Power to CLP)	+ 1500kW#	+ 10mA			
Supply Point^ (Import Power from CLP)	- 1500kW#	- 10mA			
RE Outlet (Generation)	+ 750kVar#	+ 10mA			
RE Outlet (Generation)	- 750kVar#	- 10mA			
RE Outlet (Generation)	+ 500kW##	+ 3.33mA			
RE Outlet (Generation)	- 500kW##	- 3.33mA			
RE Outlet (No generation)	0kW	0mA			

   b. Real time generation (e.g. analog signal error ≤ ± 4% or ≤ ± 0.4mA):

Real Time Generation	Actual RE output	Output Signal limit at interfacing point (a)	Actual Signal measured at interfacing point (b)	error = (b-a)/a*100% or error = (b-a)	Remarks (error ≤ ± 4% or ≤ ± 0.4mA)
RE Outlet (Generation)	100kW	0.67mA			
RE Outlet (Generation)	10kVar	0.133mA			

4. End-to-End checking with CLP in accordance with Item 3 (After connecting the telemetry circuit to CLP side and completing FiT meter installation, e.g. analog signal error ≤ ± 5% of power range or ±0.5mA, assuming 1% or ± 0.1mA error at CLP side).
   - Real time generation (error ≤ ±5% of power range or ±0.5mA): Check RE output with CLP's System Operation telemetry reading

Remarks:
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