

Package Scope

The following checklists shall be used to gather information required to be submitted to FortisAlberta at specific milestones of the interconnection process. The customer is responsible to ensure all items are completed, verified, and sent to FortisAlberta for approval to ensure the DER Project does not incur delays towards the in-service date for generation.

There are 5 packages to be submitted:

1. 110 Day Package – to be approved by FortisAlberta a minimum 110 days prior to the In-Service Date
2. Load Energization – to be approved by FortisAlberta a minimum of 30 days prior to the In-Service Date
3. 30 Day Package – to be approved by FortisAlberta a minimum of 30 days prior to the In-Service Date
4. Commissioning – to be approved by FortisAlberta on or before the In-Service Date
5. Operating Stage – to be approved by FortisAlberta at a maximum 45 days after the In-Service Date

Two dates are referred to:

- Energization Date: Date at which the customer may start critical load facilities and testing procedures.
- In-Service Date: Date at which the customer may start generating onto the distribution system.

Package Requirements

Each package is to be provided by the customer and must include the information outlined within each checklist and be submitted within the appropriate timeline to avoid delays to energization and in-service dates. Documents that require approval (such as engineering studies, protection settings, etc. as indicated) shall be submitted for review and approval in advance, and only final approved copies submitted as part of the package requirements.

All items/documents must be submitted to FortisAlberta via email/courier. Each checklist indicates required timelines for submission and specific items/documents required.

110 DAY PACKAGE - CHECKLIST

The following items must be complete and included in the 110 Day package. Complete, sign and submit this checklist as part of the package. The package must be submitted a minimum 110 days prior to the In-Service Date.

Generator Owner Information			
Company Name		Telephone Number	
Contact Name		Alt. Phone Number	
FortisAlberta Project #		Email	
AESO Project #			

Incomplete packages may incur delays to energization and in-service dates.

#	Requirements	Description	Format
1.	DER Engineering Studies	<ul style="list-style-type: none"> ▪ APEGA Authenticated Required ▪ Studied must be approved in advanced. <p>The following studies will be required. (Refer to the DER-02A for details)</p> <ul style="list-style-type: none"> ▪ Short Circuit Study ▪ Effective Grounding Study (if applicable) ▪ Self-Excitation Study (if applicable) ▪ RVC study 	PDF
2.	DER Unit Certifications	All CSA / UL certification for generating equipment must be submitted.	PDF
3.	ICAP Report including Pre-Site Evaluation	ICAP report as per DER-02D and DER-02E including Pre-Sire Evaluation.	PDF
4.	IFC Technical Data Form	<ul style="list-style-type: none"> ▪ Verify In-Service Date (ISD) ▪ Verify AESO asset ID ▪ Verify Breaker Failure ▪ All final (IFC) equipment specifications, configurations, impedances are required. This includes transformer, generator, and any supplemental grounding devices. 	PDF or Word
5.	Final Commissioning Schedule	<ul style="list-style-type: none"> ▪ Plan must include dates and times to coordinate with FortisAlberta Field Technical Services. ▪ Plan must align with FortisAlberta's IPSC (Section 2) report, and the DER-02 commissioning requirements. ▪ All operating procedures must be included. 	PDF or Word
6.	Proposed Interconnection Protection Settings (IPSC – Section 1)	<ul style="list-style-type: none"> ▪ APEGA Authenticated Required ▪ All Sections must be completed. ▪ Must be approved in advanced. 	PDF
7.	Single Line Diagram - Issued for Construction (IFC)	<ul style="list-style-type: none"> ▪ APEGA Authenticated Required ▪ See DER-02 for list of requirements ▪ Must be approved in advanced. 	PDF
8.	Site Layout, Contact Information and Access Procedure provided to FortisAlberta	Include GIS Electrical Block Diagram of Facility	PDF and .DWG or .SHP

9.	Telecom Assessment	<ul style="list-style-type: none"> Provide an assessment report on the TELUS cellular coverage, which is used to determine the FortisAlberta telecommunication requirements. 	PDF
10.	SCADA Data Concentrator DNP Points	<ul style="list-style-type: none"> DNP Points list for data concentrator, must align with requirements in DER-02. Include a communications block diagram 	PDF
11.	DER Inverter Settings (If applicable)	<ul style="list-style-type: none"> See DER-02 for list of requirements. Must be approved in advanced. 	PDF
12.	Power Quality Benchmark Monitoring Plan	<ul style="list-style-type: none"> Benchmark report is required for 7 days before any generation and within 30 days following in-service date. (Refer to DER-02, section 6.6) 	PDF
13.	AESO 100 Day Package	All deliverables from the 100 day AESO package	Zip

By signing below, you agree that you have completed all requirements above and have attached all necessary documentation to the 110 day package.

Customer Representative Name

Signature

Position Title

Date

LOAD ENERGIZATION PACKAGE - CHECKLIST

The following items must be complete and included in the 110 Day package. Complete, sign and submit this checklist as part of the package. The package must be submitted a minimum 110 days prior to the In-Service Date.

Generator Owner Information			
Company Name		Telephone Number	
Contact Name		Alt. Phone Number	
FortisAlberta Project #		Email	
AESO Project #			

Incomplete packages may incur delays to energization and in-service dates.

#	Requirements	Description	Format
1.	Interconnection Protection Settings (IPSC – Section 2)	<ul style="list-style-type: none"> ▪ APEGA Authenticated Required ▪ All Sections must be completed. ▪ Must be approved by FortisAlberta 	PDF
2.	Electrical Permit		PDF
3.	Electrical Service Agreement		PDF
4.	110 Day Package Gate Letter	<ul style="list-style-type: none"> ▪ Must be signed by FortisAlberta 	PDF
5.	Proof customer has enrolled their site IDs with a retailer		PDF
6.	Meter Verification Certificate		PDF
7.	Proof electrical permit is on site and at the meter	<ul style="list-style-type: none"> ▪ A photo and declaration 	PDF
8.	Completed and signed interconnection site work plan		PDF

By signing below, you agree that you have completed all requirements above and have attached all necessary documentation to the load energization package.

Customer Representative Name

Signature

Position Title

Date

30 DAY PACKAGE

The following items must be complete and included in the 30 Day package. Complete, sign and submit this checklist as part of the package. The package must be submitted a minimum 30 days prior to the In-Service Date.

Generator Owner Information			
Company Name		Telephone Number	
Contact Name		Alt. Phone Number	
FortisAlberta Project #		Email	
AESO Project #			

Incomplete packages may incur delays to energization and in-service dates.

#	Requirements	Description	Format
1.	Data Concentrator Bench Test Report	<ul style="list-style-type: none"> Point to point testing of all DNP points Verification of class, variation, scaling, dead banding, output type. 	PDF or Word
2.	Power Quality pre-energization benchmark report.		PDF
3.	ICAP Report including On-Site Protection Evaluation	ICAP report as per DER-02D and DER-02E including Pre-Sire Evaluation and On-Site Protection Evaluation.	PDF
4.	Switching procedures submitted		PDF
5.	Operating procedures		PDF
6.	Certificate of insurance		PDF
7.	Joint use agreement (if applicable)	If not applicable submit a document stating it is not applicable	PDF
8.	AESO Asset ID		PDF
9.	Load energization gate letter (if granted before the 30 day package) or load energization gate deliverables (if not previously approved to energize as a load)	<ul style="list-style-type: none"> Must be signed by FortisAlberta 	PDF
10.	AESO 30 Day Package	<ul style="list-style-type: none"> All deliverables from the 30 day AESO package 	Zip

By signing below, you agree that you have completed all requirements above and have attached all necessary documentation to the 30 day package.

Customer Representative Name

Signature

Position Title

Date

COMMISSIONING PACKAGE

The following items must be complete and included in the Final Commissioning Package. Complete, sign and submit this checklist as part of the package. The package must be submitted prior to the commercial operation date.

Generator Owner Information			
Company Name		Telephone Number	
Contact Name		Alt. Phone Number	
FortisAlberta Project #		Email	
AESO Project #			

Incomplete packages may incur delays to energization and in-service dates.

#	Requirements	Description	Format
1.	Interconnection Protection Settings (IPSC – Section 3)	<ul style="list-style-type: none"> APEGA Authenticated Required All Sections must be completed. Must be approved by FortisAlberta 	PDF
2.	ICAP Report including On-Site Performance Evaluation	ICAP report as per DER-02D and DER-02E including Pre-Sire Evaluation, On-Site Protection Evaluation and On-Site Performance Evaluation.	PDF
3.	Connection Authorization Form/ Signed Permit	Signed by GFO Safety Codes Officer	PDF or Word
4.	As-built SLDs		PDF
5.	EMTP-RV and PSCAD Inverter models (for inverter-based generation)	<ul style="list-style-type: none"> Manufacturer black box models 	EMTP: .ecf with model and the .dll file. PSCAD: .pscx with .lib file
6.	Detailed modelling data (e.g., transient reactance, time constants etc.) for non-inverter-based generation		PDF
7.	30 Day Package Gate Letter	<ul style="list-style-type: none"> Must be signed by FortisAlberta 	PDF

By signing below, you agree that you have completed all requirements above and have attached all necessary documentation to the Commissioning package.

Customer Representative Name _____ Signature _____

Position Title _____ Date _____

OPERATING STAGE PACKAGE

The following items must be complete and included in the Post Commission Package. Complete, sign and submit this checklist as part of the package. The package must be submitted at a maximum 45 days after the commercial operation date.

Generator Owner Information			
Company Name		Telephone Number	
Contact Name		Alt. Phone Number	
FortisAlberta Project #		Email	
AESO Project #			

#	Requirements	Description	Format
1.	Power Quality Post Energization Compliance Report	<ul style="list-style-type: none"> Benchmark report is required within 30 days following the in-service date. (Refer to DER-02, section 6.6) Must comply with the PQ specification document PQ-SPEC-01 	PDF or Word
2.	As-built Communication Block Diagram		PDF
3.	As-built RAS Logic Diagram		PDF
4.	Metering Field Installation Test Report		PDF or Word
5.	Maintenance Verification Plan / Schedule	<ul style="list-style-type: none"> Provide a plan and schedule for the maintenance plan as set in the interconnection agreement. 	PDF or Word
6.	Commissioning Gate Letter	<ul style="list-style-type: none"> Must be signed by FortisAlberta 	PDF

By signing below, you agree that you have completed all requirements above and have attached all necessary documentation to the Operating Stage package.

Customer Representative Name

Signature

Position Title

Date