



Brooks, Alberta

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Disclaimer

LIMITATION OF LIABILITY AND DISCLAIMER This document is not a replacement for electrical codes or other applicable standards. This document is not intended or provided as a design specification or as an instruction manual. The DER owner, employees or agents recognize that they are, at all times, solely responsible for the generator plant design, construction and operation. FortisAlberta Inc. (FAI), and any person employed on its behalf, makes no warranties or representations of any kind with respect to the DER requirements contained in this document, including, without limitation, its quality, accuracy, completeness or fitness for any particular purpose, and FAI will not be liable for any loss or damage arising from the use of this document, any conclusions a user derives from the information in this document or any reliance by the user on the information it contains. FAI reserves the right to amend any of the requirements at any time. Any person wishing to make a decision based on the content of this document should consult with FAI prior to making any such decision.

Overview

This guide outlines the Distributed Energy Resources (DER) interconnection with FortisAlberta and explains the phases for DER projects, including Distributed Generation (DG). Each phase includes these components:

- Purpose
- Key Matters
 - The information contained in these sections is intended to capture the important, fundamental considerations for the project development to be reviewed. The lists are intended as general conversation starters at the beginning stages of each phase that will lead into more comprehensive discussions as the project progresses.
 - The Key Matters are not exclusive to the specific project phase in which they are listed. Each topic listed can be utilized in conversations for other phases. The Key Matters listed do not represent all the requirements for a project. Detailed Requirements are captured in subsequent sections.
- Milestones
- Customer Requirements
 - The technical requirements to be met for each phase.
- FortisAlberta Roles and Responsibilities
- Queue
 - This section of each phase outlines the practices FortisAlberta has implemented to administer the Substation Feeder Capacity Queue (the DER Queue). The objectives of the DER Queue Management Practices are as follows:
 - Ensure fair and non-discriminatory treatment of DER projects
 - Ensure efficient progression of DER projects through the interconnection process
 - Clarify key queuing milestones in the interconnection process
 - Align FortisAlberta's queuing practices with Alberta Electric System Operator's (AESO) Stage 2 On Hold for Behind the Fence (BTF) projects
 - FortisAlberta's DER Queue phases and timelines are applicable to every customer's project, regardless of the number of projects waiting to connect at a substation feeder.
 - To remain in the DER Queue, customers must complete all the requirements in each interconnection phase within the time frames outlined. Any significant change to the approved scope of a project will result in the need for the project to be re-started and the risk of losing the project's position in the DER Queue.
 - If the DER Queue Management Practice requirements are not met, the project will be removed from the DER Queue. When projects are removed from the DER Queue, contingent projects will be considered next-in-line and those customers will be notified of the change with the corresponding updated High Level Study (HLS) or Detailed Level (DLS) Study (cost and available capacity).

NOTE: Milestones along with Roles and Responsibilities have visual flowcharts in Annex A and B respectively.

Phase 1 Pre-Application Consultation

Purpose

To assist customers who are new to DER to understand the overall connection process and investigate hosting capacity at their sites of interest prior to entering the DER Queue. This is an information gathering and project scoping phase to help customers select a feasible location. A Hosting Capacity map is also available along with a project list by feeder, [Hosting Capacity \(fortisalberta.com\)](https://www.fortisalberta.com/hosting-capacity).

Key Matters

(conversation starters)

1. Overall process – DER Interconnection Guide overview
2. [Distributed Generation | FortisAlberta](#) and [Distributed Generation Library | FortisAlberta](#)
3. Hosting Capacity Map & Distribution Generation Project List [Hosting Capacity \(fortisalberta.com\)](https://www.fortisalberta.com/hosting-capacity)
 - 3.1 Capacities of feeders and substations / Existing Connected Generators/Impact of “zero” load
 - 3.2 Location of substation and project location
4. DER Application for HLS required to initiate a project
5. Customer proposed generator capacity
6. Application Fees for studies for application and different phases
7. An authenticated DER owner Single Line Diagram (SLD) will be required for the Detailed Level Study (DLS)
8. Option M is an option now and will not be ongoing

Milestones

1. This is an optional step, however, it is recommended to help new customers understand the DER Interconnection process, who is involved, and most importantly, where to find a location to successfully connect the project.
2. Our consultation fees start at \$500 to review up to five project locations. A fee of \$250 will be added for each additional location. Customers may submit a [Pre-Application Request to generation@fortisalberta.com](mailto:generation@fortisalberta.com).

Customer Requirements

1. Review the Hosting Capacity Map.
2. Review the [DER-02 FortisAlberta Interconnection Requirements](#) and other technical documents in the [Distributed Generation Library | FortisAlberta](#)

FortisAlberta Roles and Responsibilities

1. All communication, deliverables, and invoicing are completed within the Customer Connections group.
2. Stakeholder Relations Manager (SRM) to discuss and provide high level assessment of potential customer sites.

Queue

A project does not enter the DER Queue during this phase.

Phase 2 High Level Study (HLS): Application and Study

Purpose

For the customer to formally initiate the connection process, secure a spot in the distribution capacity queue, and receive a high level assessment of generation interconnection requirements and a ballpark cost estimate for interconnection. See phases 2.1 and 2.2 for Key Matters, Milestones, Requirements, Roles and Responsibilities, and Queue.

Phase 2.1 Application for High Level Study

Purpose

To submit a HLS application and fees to formally initiate a high level study and secure a spot in the distribution capacity queue.

Key Matters

(conversation starters)

1. Submission Package
 - 1.1 DER HLS application
 - 1.2 Site Location
 - 1.3 Application Fee
2. Technical Requirements to initiate study
3. Queue entry and basic queue process
4. If a DER customer has a preference of any feeder, it should be mentioned in the DER HLS application
5. Distribution only (Transmission is optional)

Milestones

DER queue is entered once the HLS fee is paid. The high level study fee is \$4,000 (+ GST) per site to complete the distribution high level study. The optional transmission high level study fee is \$3,000 (+ GST) per site.

Customer Requirements

1. Review hosting capacity limits provided within the hosting capacity map and project list.
[FortisAlberta Hosting Capacity](#)
2. Submit the [High Level Study Application](#) to generation@fortisalberta.com.
3. Ensure the application has all the customer information required, including technical, to ensure the study can proceed.

FortisAlberta Roles and Responsibilities

SRM presents the customer an option for a kickoff meeting and schedules it with Customer Planning if requested.

Queue

FortisAlberta will issue an invoice for the HLS fee after your application is received. Once the HLS fee is paid and the required technical information is provided to complete the study, the project enters the DER Queue. If the invoice is not paid by the due date of 30 calendar days or if the appropriate technical information is not provided, the project will be cancelled.

NOTE: Change of Scope: If a scope change is made by the customer (e.g., change of feeder, change of location, increase of capacity, changes to the generator type), the project will be removed from the DER Queue and a new HLS will be required along with applicable fees. If the change of scope does not negatively impact the completed study results, a new HLS may not be required, and the project may retain the DER Queue position at FortisAlberta’s sole discretion.

Phase 2.2 High Level Study

Purpose

To provide the customer a high-level assessment of the interconnection requirements at a specific site and a ballpark cost for interconnection, including high level upgrade options.

Key Matters

(Conversation starters)

1. High Level Study Report results:
 - 1.1 Impact of “zero” load and how it affects export while operating
 - 1.2 Export capacity, feeder minimum load, and power factor – explanation of variations
 - 1.3 Distribution system voltage regulation impacts on a project
 - 1.4 CSA standard voltage limits
 - 1.5 Outages – DERs export on primary feeder studied, not for alternate feeders for load restoration
 - 1.6 Ballpark quote is done without a site check, any underground construction required at the detailed level study phase will require additional upgrades
 - 1.7 Other considerations – fault contribution limits, equipment loading limits, Supply Transmission Service (STS)
2. Detailed Level Study Information package – contents, need for application, etc.
3. Deadline for queue

Milestones

High Level Study phase is complete when the customer signs and returns the high level study letter.

Customer Requirements

1. Review [DER-02 FortisAlberta Interconnection Requirements](#)
2. Customer returns HLS letter, signed with accepted HLS alternative indicated

FortisAlberta Roles and Responsibilities

1. Customer Planning completes HLS based on complete HLS application form and optional customer meeting.
2. SRM reviews HLS study results and asks if the customer would like a review meeting for the results and schedules one with Customer Planning if required.
3. Optional transmission HLS: SRM asks if one is desired, and if so, coordinates a scope document to be created and sent to the transmission facility owner (TFO). SRM sends request and customer collected payment to the TFO.

Queue

1. After the HLS is completed, FortisAlberta will send the HLS proposal for a review period of 30 calendar days. FortisAlberta must receive the signed HLS acceptance letter for the location and/or option specified in the HLS within 30 calendar days or the project will be removed from the DER Queue. Once FortisAlberta receives the signed HLS acceptance letter, an invoice will be sent for the Detailed Distribution Study and Transmission System Interconnection Study fees.
2. Any project removed from the DER Queue will have to begin the interconnection process again by applying for a new HLS with all applicable fees.

Phase 3 Detailed Level Study (DLS): Applications and Design

Purpose

To initiate and complete detailed studies and design related to the distribution and transmission systems. To initiate the Alberta Electric System Operator (AESO) Behind the Fence connection process, if required. The distribution and transmission studies happen in parallel. See phases 3.1, 3.2, 3.3 for Key Matters, Milestones, Requirements, Roles and Responsibilities.

Queue

Once the High Level Study is received, the customer has reached the first go/no-go point where they may choose to tweak their project, submit a new HLS application with a revised scope for a new project, or continue forward with a Detailed Distribution Study application. The Transmission System Interconnection Study is kicked off concurrent with the Detailed Distribution Study.

Phase 3.1 Application for Distribution Detailed Level Study

Purpose

Submit the Detailed Level Study application and fees to initiate the detailed study activities and hold position in the distribution queue.

Key Matters

(conversation starters)

1. DLS Application including all required information
2. Application Fees – FortisAlberta, TFO (protection study and power flow study security)
3. Technical Requirements to initiate study
4. See [DER-02 FortisAlberta Interconnection Requirements](#)

Milestones

Once a Detailed Level Study application and payment are received, the detailed level study will commence. The detailed level study fee is \$10,000 (+ GST) for projects that do not require an AESO Behind the Fence (BTF) project, and an additional \$10,000 (+ GST) when there is an AESO Behind the Fence (BTF) project involved.

Customer Requirements

1. Customer to provide a **completed** DLS Application including site plan, estimated generator and transformer impedance details, and details for all supplemental grounding devices required. The application will be delayed if the form is not filled out completely.

Note: Where FortisAlberta system data is required for engineering studies, sections may be excluded for the initial submission.

2. Preliminary results for the following studies are required to start the protection assessment phase of the detailed level study.
 - Effective Grounding (if applicable, see DER-02B)
 - Short Circuit
3. Customer to provide a detailed SLD, authenticated by a professional engineer accredited with APEGA.

FortisAlberta Roles and Responsibilities

Contracts Analyst sends the DLS invoice.

Queue

FortisAlberta will advance the project to the Detail Distribution Study and Transmission System Interconnection Study phase upon full payment of the applicable fees and submission of the Detailed Level Study application within 30 calendar days or the project will be removed from the DER Queue.

Phase 3.2 Distribution Detailed Level Study and Design

Purpose

To complete detailed studies and design related to the distribution system.

Key Matters

(conversation starters)

1. Technical Requirements to complete Proposal
 - 1.1 Short Circuit Study
 - 1.2 Effective Grounding Study
 - 1.3 Self-Excitation Study (If Applicable)

Milestones

FortisAlberta will provide a distribution interconnection cost to review.

Customer Requirements

Customer to provide updated SLD and required distribution protection/grounding studies.

FortisAlberta Roles and Responsibilities

1. SRM schedules and chairs a meeting with the customer, Customer Planning, Protection & Control, and Operations Planning to verify technical requirements of the project and hand off the project to Operations Planning for the AESO BTF process.
2. Customer Planning and Protection & Control complete all detailed distribution studies.
3. SRM engages the construction Project Manager.
4. Customer Connections provides the distribution detailed study results and cost as an information package.

Queue

The customer can decide to withdraw the project based on the distribution cost; in which case the project is removed from FortisAlberta's DER Queue.

Phase 3.3 Transmission Detailed Study and Design

Purpose

To complete detailed studies and design related to the transmission system. On behalf of the customer, FortisAlberta to submit application to the AESO to initiate a Behind the Fence (BTF) Connection project and technical scope with fees to the TFO.

Key Matters

(conversation starters)

1. Ensure clearly defined requirements for a System Access Service Request (SASR), Supply Transmission Service (STS), In-service Date (ISD) and annual MW/h generation
2. TFO scope document requirements
 - Clearly defined requirements for transfer trip, protection (reclose block, anti-islanding), load shed
2. TFO – transmission Anti-Islanding Screen or Study

Note: FortisAlberta studies shall be provided in the 110-day package
3. TFO Protection & Control Study is done by the customer or consultant hired by the customer
3. Generator Unit Owner's Contributions (GUOC) payment
4. System Access Service Agreement (SASA) for STS
5. [AESO Behind the Fence \(BTF\) Process BTF Process Quick Reference Guide 2021.pdf \(aeso.ca\)](#)

Milestones

Pay the transmission study fee. The cost varies based on project location and scope and starts at \$30,000 (+ GST) for a typical project.

Customer Requirements

Complete AESO / Transmission related studies requirements (if required) for Anti-Islanding.

FortisAlberta Roles and Responsibilities

1. Customer Planning finalizes the AltaLink scope document
2. Operations Planning submits a System Access Service Request (SASR) to the AESO to initiate BTF project.
3. Operations Planning coordinates with the customer, TFO, and the AESO to complete all deliverables of the AESO BTF Process.
4. Customer Connections coordinates invoicing of the customer and payment to the TFO.
5. Transmission scope of work and estimate are generated at the end of the AESO BTF Stage 3/4.

Queue

1. If the project requires any transmission system upgrades, it is entered into the AESO Behind the Fence (BTF) gating process. Typically, this Phase for the Transmission System Interconnection Study takes 32 to 36 weeks and FortisAlberta will maintain the project queue position during this time.
 - a. During this stage, the AESO applies its own queue management practices and requirements for projects. Failure to meet these required timelines can result in removal from the AESO queue. Projects that are removed from the AESO Connection Queue will subsequently be removed from the FortisAlberta DER Queue. Proponents can find detailed information on the AESO connection process here, [Connecting to the grid » AESO](#).
2. With the introduction of the AESO's Stage 2 On Hold option, the project can be paused to allow the customer to re-assess current conditions and the project's continued viability. During the time the project is using the AESO 'On Hold' option, the project is essentially parked, and other projects can now use the Transmission capacity previously considered for your project. Selecting to place the project to the AESO's On Hold option will also park the project in FortisAlberta's DER Queue.
3. The DER Queue position is not held while the project is On Hold. Projects that are placed On Hold during Stage 2 in the AESO Connection Queue will be allowed to be put On Hold in FortisAlberta's DER Queue but subject to the same consequences of other projects advancing while the project is On Hold.
4. When the customer decides to restart their project, FortisAlberta will review any change(s) to the FortisAlberta DER Queue and provide an update to the customer of the impact of restarting the project and any new study requirements that may be required and/or the impact of DER Queue change(s). The customer will then need to meet these new requirements and accepts the risk that the project parameters may no longer be viable when the project is restarted.

Phase 4 Interconnection Proposal

Purpose

To provide the customer with a complete interconnection proposal, including all distribution and transmission costs and construction requirements for their consideration.

Key Matters

(conversation starters)

1. Explanation of Proposal contents:
 - 1.1 Detailed Level Study Report
 - 1.2 Construction scope
 - 1.3 Fees to move to Construction
 - 1.4 TFO proposal
2. Changes from DER Owner would mean a new detailed study

Milestones

1. Distribution Detailed Level Study and Transmission System Interconnection Study are complete.
2. FortisAlberta will provide the customer with a Final Interconnection Proposal that outlines the final cost for distribution and transmission infrastructure upgrades that are required to interconnect the project (detail distribution interconnection cost, pre-paid Operating and Maintenance (O&M) cost and Transmission Facility Owner (TFO) Proposal to Provide Service (PPS) costs). The proposal will also specify the final technical requirements.
3. Construction is initiated upon customer acceptance and payment of all costs.

Customer Requirements

Review Interconnection Proposal and accept proposal.

FortisAlberta Roles and Responsibilities

Customer Connections compiles distribution scope & estimate, transmission scope & estimate, and virtual load service estimate into a complete interconnection proposal.

Queue

1. FortisAlberta must receive the signed Quote Letter within 30 calendar days or the project is cancelled and removed from the DER Queue.
2. Once the signed Quote Letter is received, FortisAlberta will send the construction invoices for the full construction cost, Transmission, Distribution, O&M, and the administration fee.
3. FortisAlberta must receive the payment within 30 calendar days to advance the project to the construction stage. If the full payment is not received by the invoice due date, the project will be removed from the DER Queue.

Phase 5 Construction

Purpose

To initiate and complete all construction and commissioning required for the interconnection. See phases 5.1, 5.2, 5.3 for Milestones, Requirements, Roles and Responsibilities.

Key Matters

(conversation starters)

110-day, 30-day, commission checklists

Queue

Queue position maintained once the construction invoices are paid.

Phase 5.1 Pre-Construction

Purpose

To schedule and initiate construction and commissioning activities and draft formal agreements.

Key Matters

(conversation starters)

1. Customer should have Engineering studies by now ready to share (aligned with 110-day checklist)
2. Project Manager assigned and coordinating – to provide construction schedule
3. FortisAlberta Detailed study validation – communicate recalculation of power factor (p.f.) for full generator size, then maximum generation export at unity (100% p.f.) for DER operations
4. Agreements/documents shared with the customer – (Interconnection Agreement, Operating Procedure, Remote Trip Agreement (RTA), AESO energization Package deliverables [Energization-Package-Requirements-v6.pdf \(aeso.ca\)](#), FortisAlberta DER Interconnection Checklist, DER-02 FortisAlberta Interconnection Requirements, connection authorization form)
5. Identify risks that put a project that may delay project interconnection
6. Supervisory Control and Data Acquisition (SCADA) process – SCADA Junction Box (pick up from area office, installation directions), DNP3 map points list location/approval, concentrator bench test report, protection device/SCADA commissioning

Milestones

110-day checklist completion.

Customer Requirements

1. Complete the 110-day checklist with FortisAlberta and submit the 110-day package.
2. Point of Common Coupling (PCC) must be clearly defined at customer site.

FortisAlberta Roles and Responsibilities

1. Engineering, Project Manager, and Operations engage with the customer to define the final requirements for interconnection, construction, and commissioning.
2. Customer Connections coordinates with the TFO to have the required funding in place.
3. Contracts Analyst will work with the customer to finalize the Interconnection Agreement and Operating Agreements.

Queue

Queue position maintained once the construction invoices are paid.

Phase 5.2 Construction

Purpose

To complete all construction activities and energize customer site load.

Key Matters

(conversation starters)

1. 30-day checklist
2. Energization of site, providing power (not export generation, that is at the in-service date in a later phase)
3. Pre-commissioning

Milestones

30-day checklist completion.

Customer Requirements

Customer to complete the 30-day checklist with FortisAlberta and submit the 30-Day package.

FortisAlberta Roles and Responsibilities

1. FortisAlberta Project Manager completes distribution construction and connection of DER and engages Operations and Field Technical Services for final interconnection and anticipate commissioning.
2. Operations Planning works with the AESO, TFO and the customer to complete required transmission upgrades and meet all AESO BTF stage 5 requirements. Operational Planning, Protection & Control, and SCADA coordinate with the customer to ensure all required studies are completed and accepted, and commission DER with Field Technical Services.
3. Contracts Analyst coordinates ESA, Interconnection Agreement, and Operating Procedures sign-off with customer.

Queue

Queue position maintained once the construction invoices are paid.

Phase 5.3 Commission

Purpose

To complete all commissioning activities required for power export. To complete the execution of formal agreements. To establish relationship and expectations between the customer Operator-in-Charge (OIC), Field Operations, and FortisAlberta Control Centre (FCC).

Key Matters

(conversation starters)

1. Commissioning checklist
 - 1.1 Protection settings
 - 1.2 SCADA points list and bench test report completed
2. Post-commissioning checklist

Milestones

Commission checklist completion.

Customer Requirements

1. Customer to complete the commissioning checklist with FortisAlberta
2. Submit Final Commissioning Report to FortisAlberta (IPSC Section 2)

FortisAlberta Roles and Responsibilities

1. Protection and Control to review all requirements.
2. Contracts Analyst to execute agreements.
3. FCC and Field Operations to communicate expectations.

Queue

No queue position, final stages of the project.

Phase 6 Operate

Purpose

To enable the export of power from the customer site. To maintain an effective (active and current) on-going customer relationship.

Key Matters

(conversation starters)

1. Operating procedures and responsibilities confirmed
2. Annual requirements
 - 2.1 Annual maintenance form from the customer
 - 2.2 Operator-in-Charge information kept current

Milestones

1. Post-commission checklist complete.
2. As-built Drawings
3. Ongoing annual maintenance updates from the customer
4. Ongoing Operator-in-Charge (OIC) updates from the customer as required

Customer Requirements

1. Customer to complete the post commissioning checklist with FortisAlberta
2. Submit Power Quality Benchmark Report to FortisAlberta for review and approval.
3. Submit all as-builts
4. Comply with current industry standards.

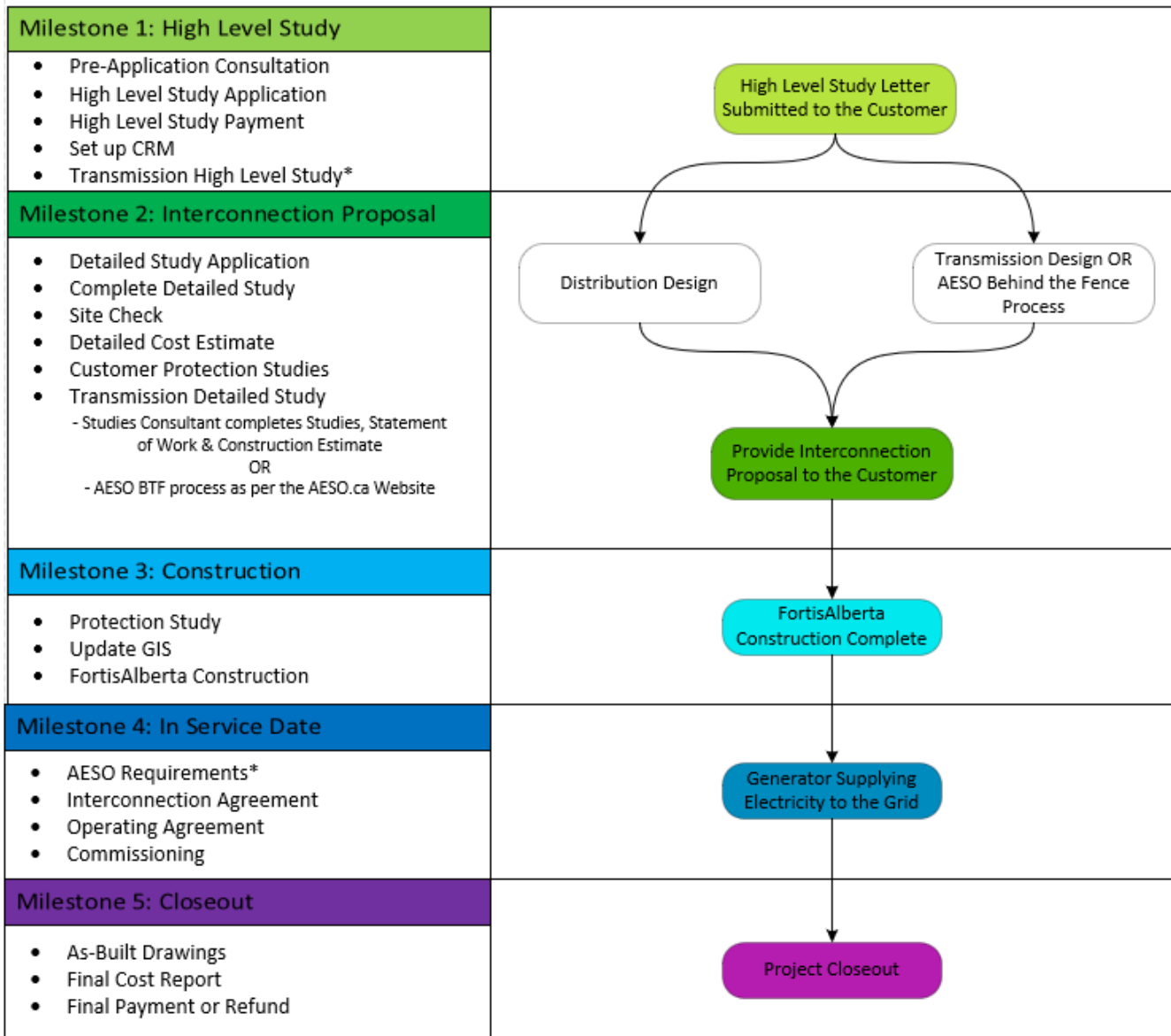
FortisAlberta Roles and Responsibilities

Engineering revises standards with updates in the industry, codes, and external standards.

Queue

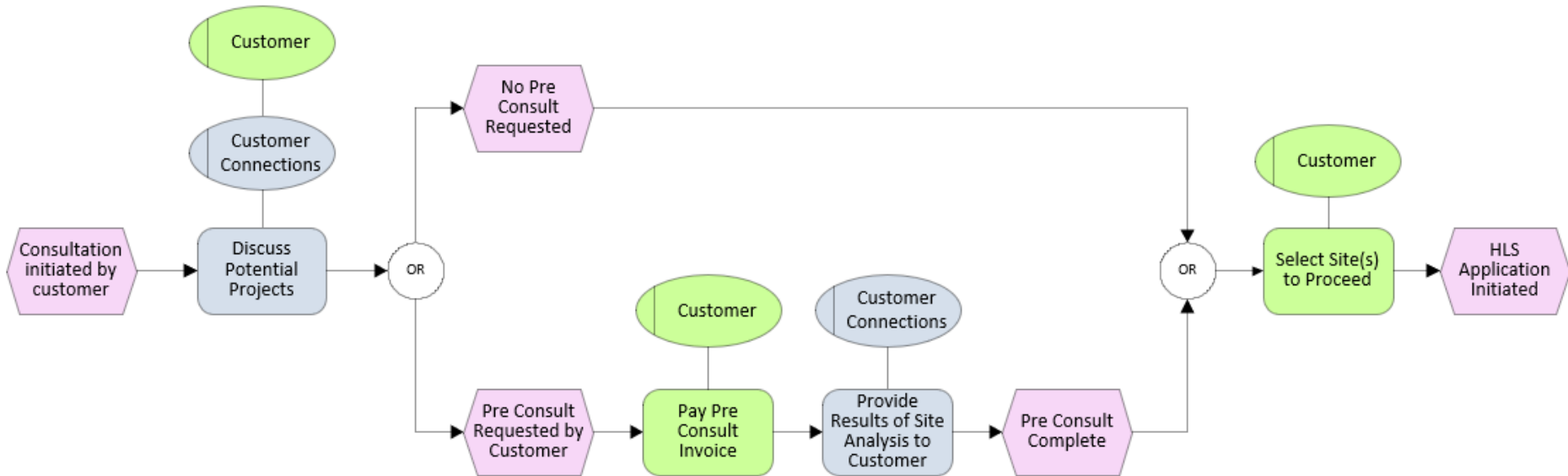
No queue position.

Annex A Milestones Flowchart (Informative)

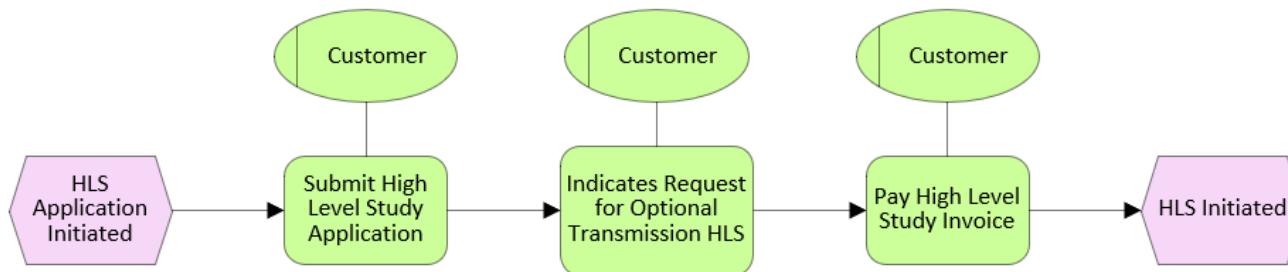


Annex B DER Interconnection Flowchart (Informative)

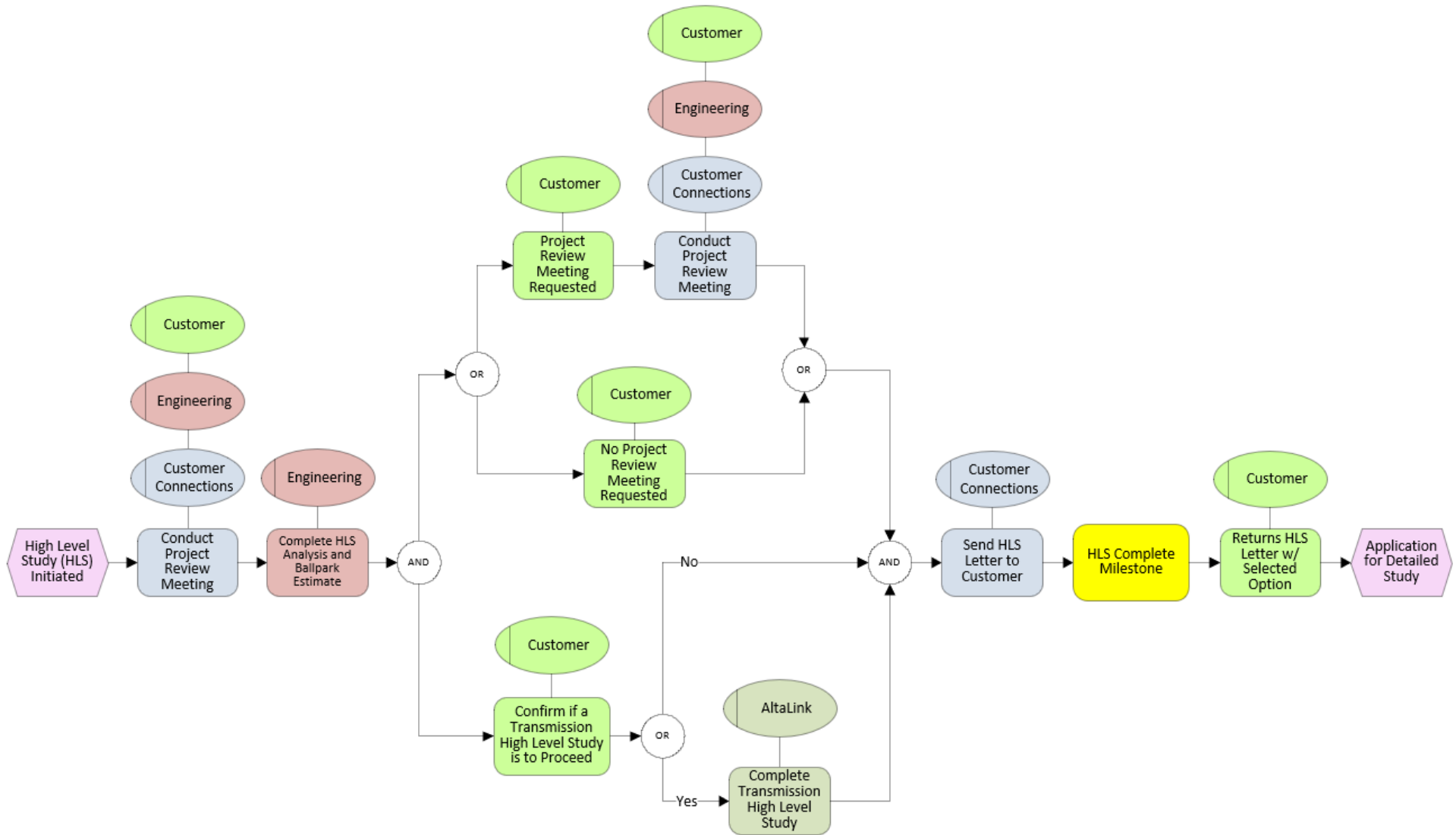
B1. Phase 1 Pre-Application Consultation



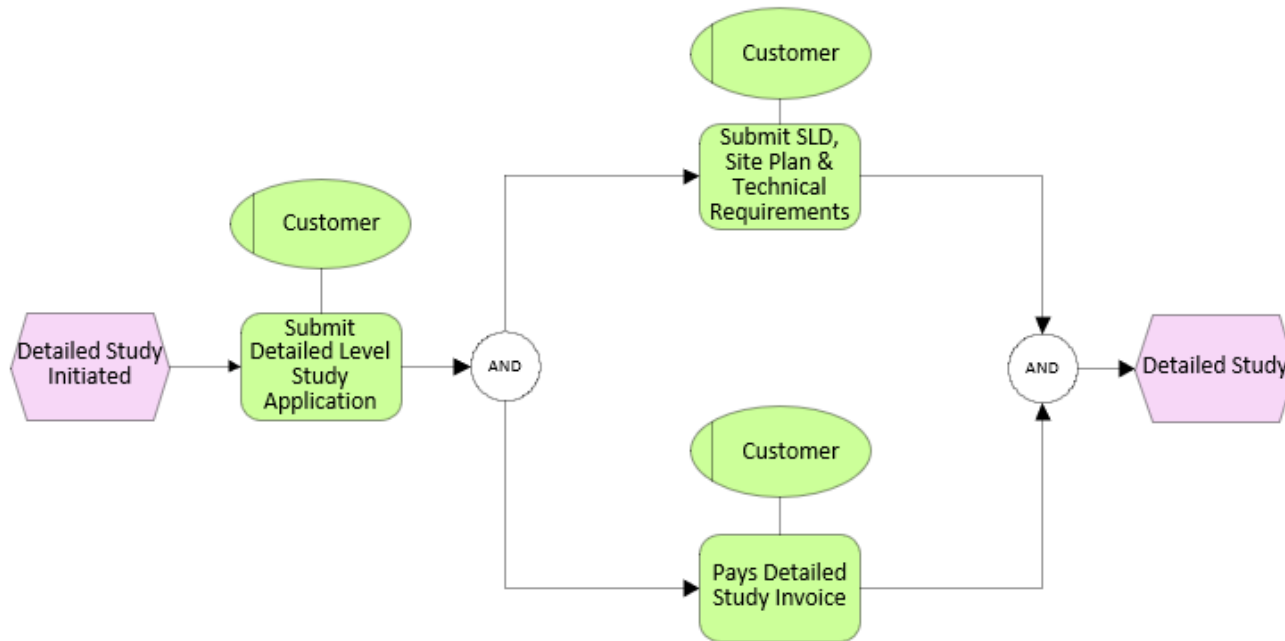
B2. Phase 2.1 Application for High Level Study



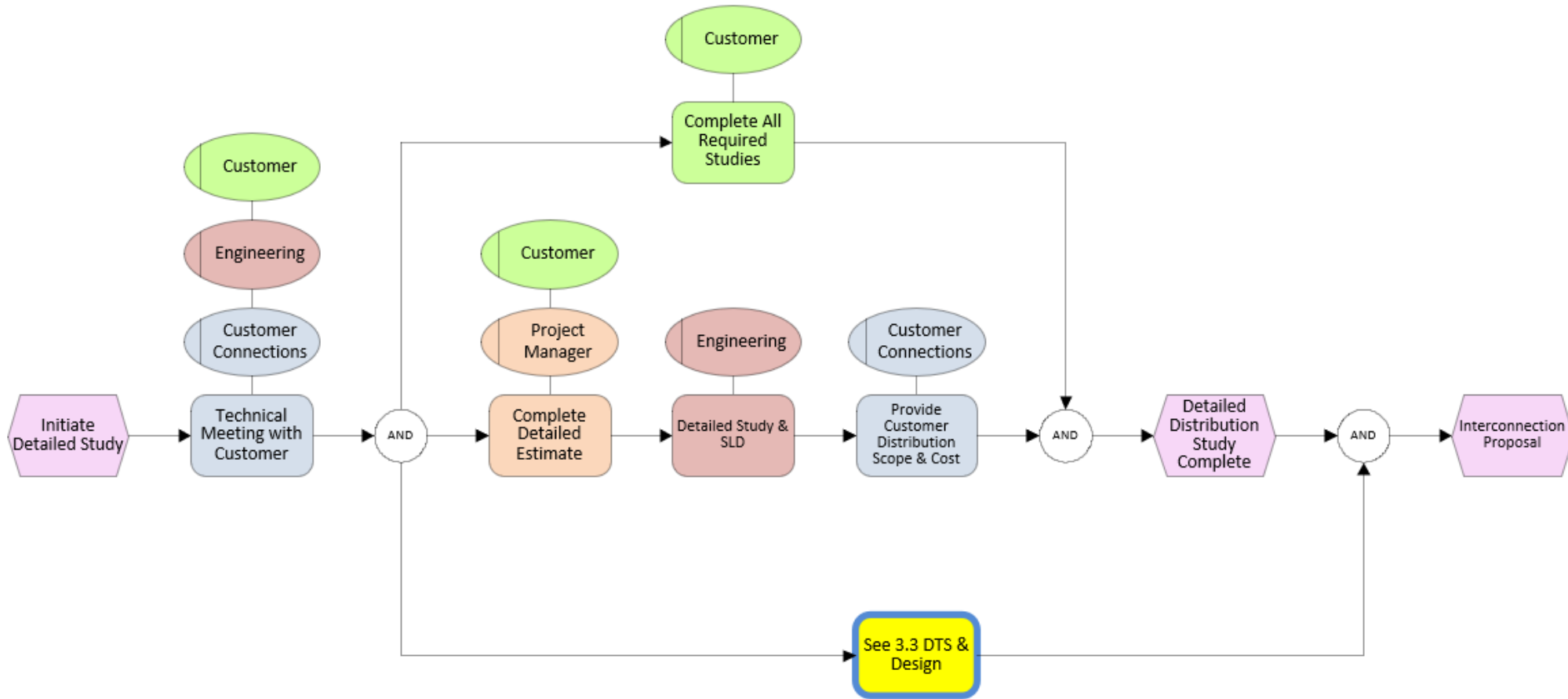
B3. Phase 2.2 High Level Study



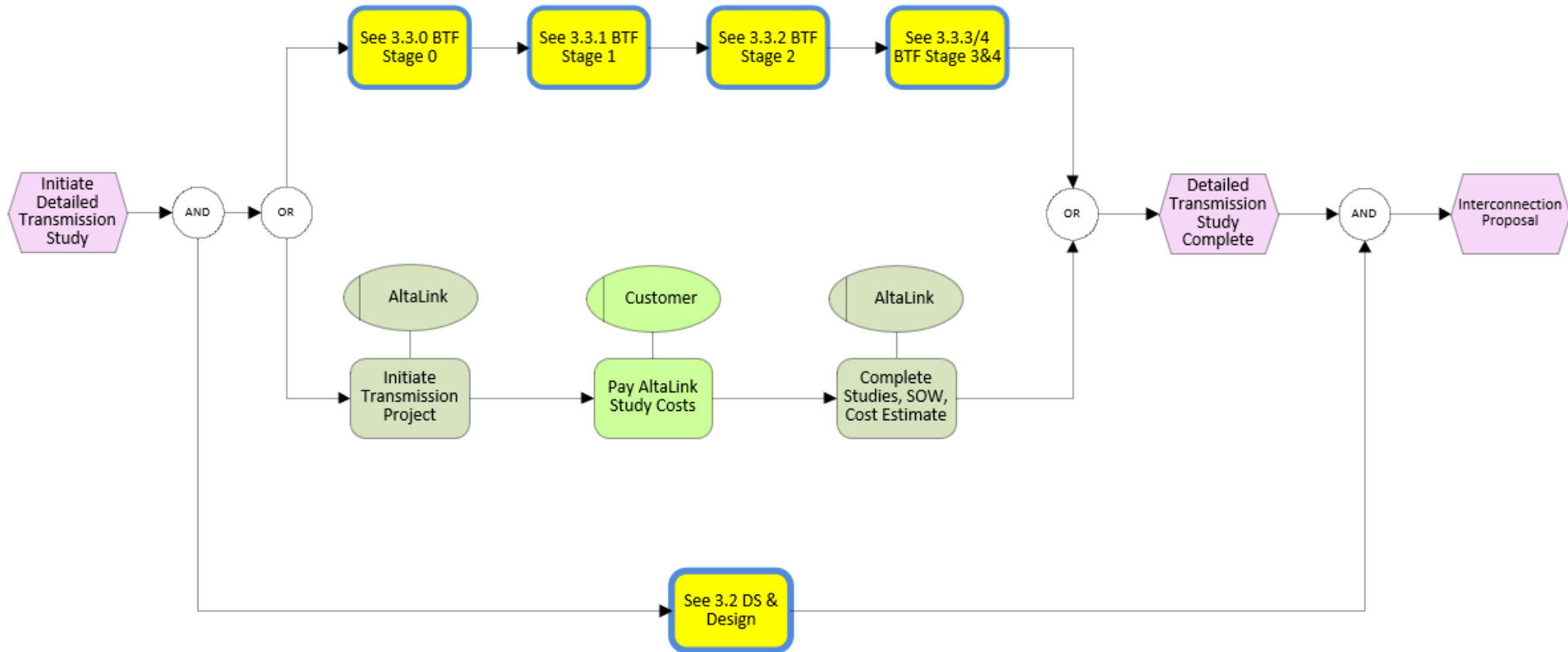
B4. Phase 3.1 Application for Detailed Level Study



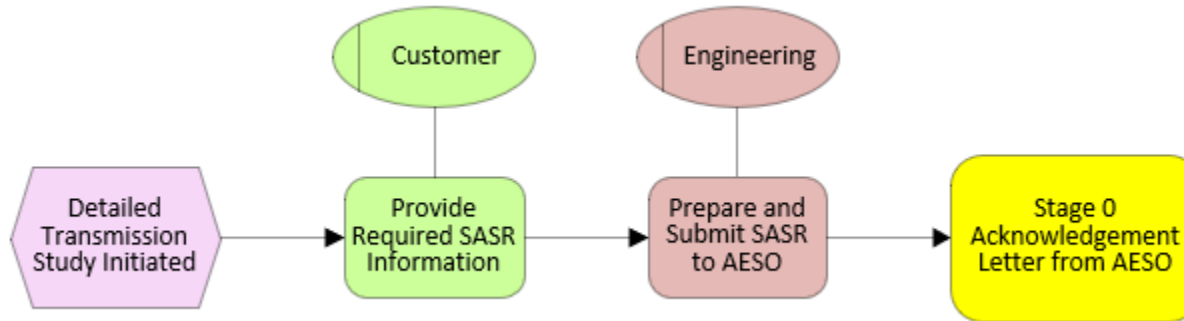
B5. Phase 3.2 Distribution Detailed Level Study and Design



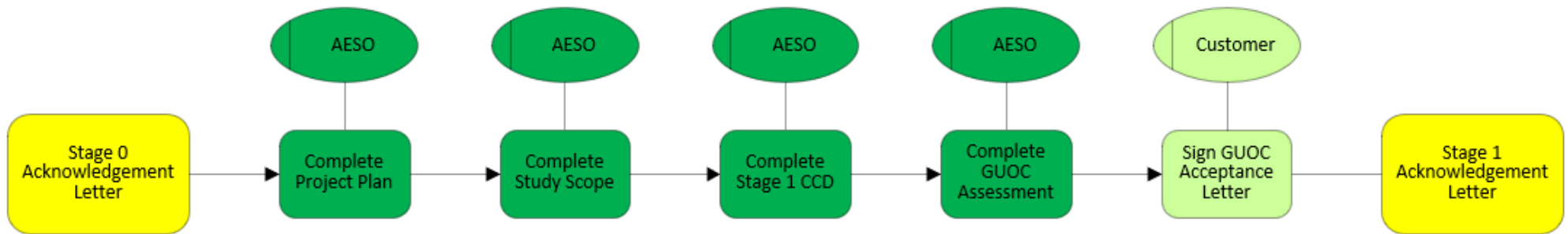
B6. Phase 3.3 Transmission Detailed Study and Design



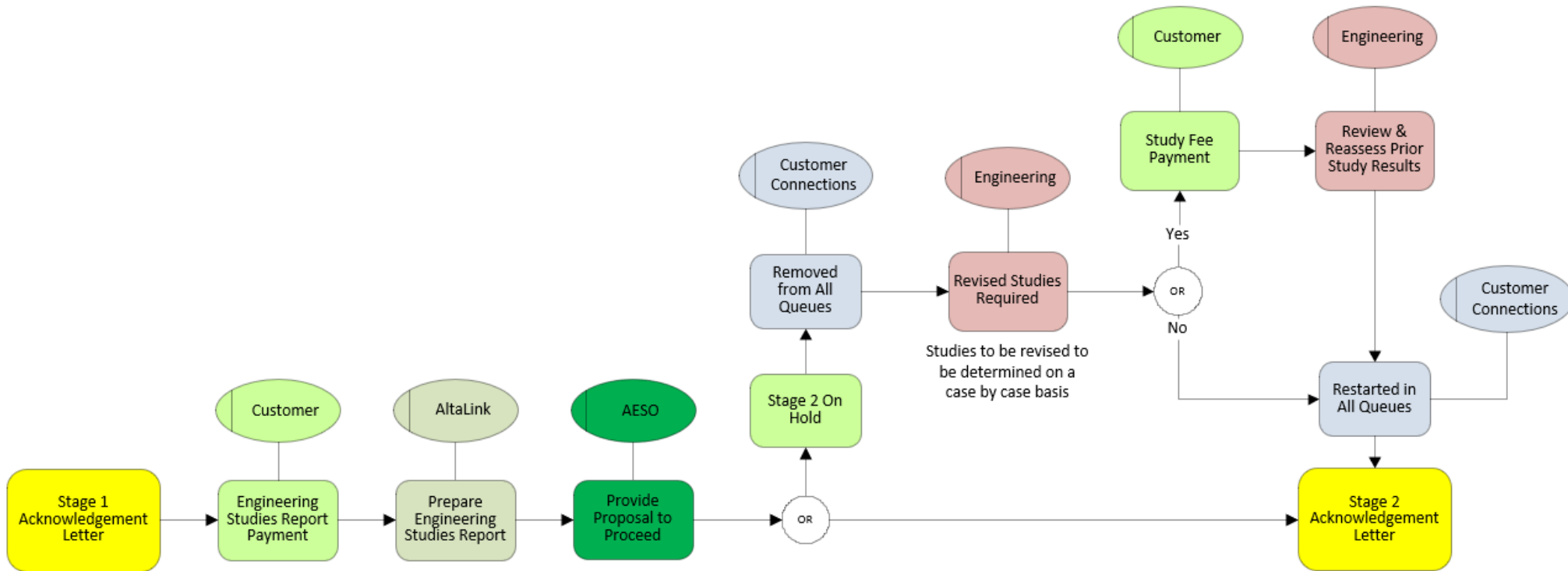
B7. Phase 3.3.0 AESO Behind the Fence Stage 0



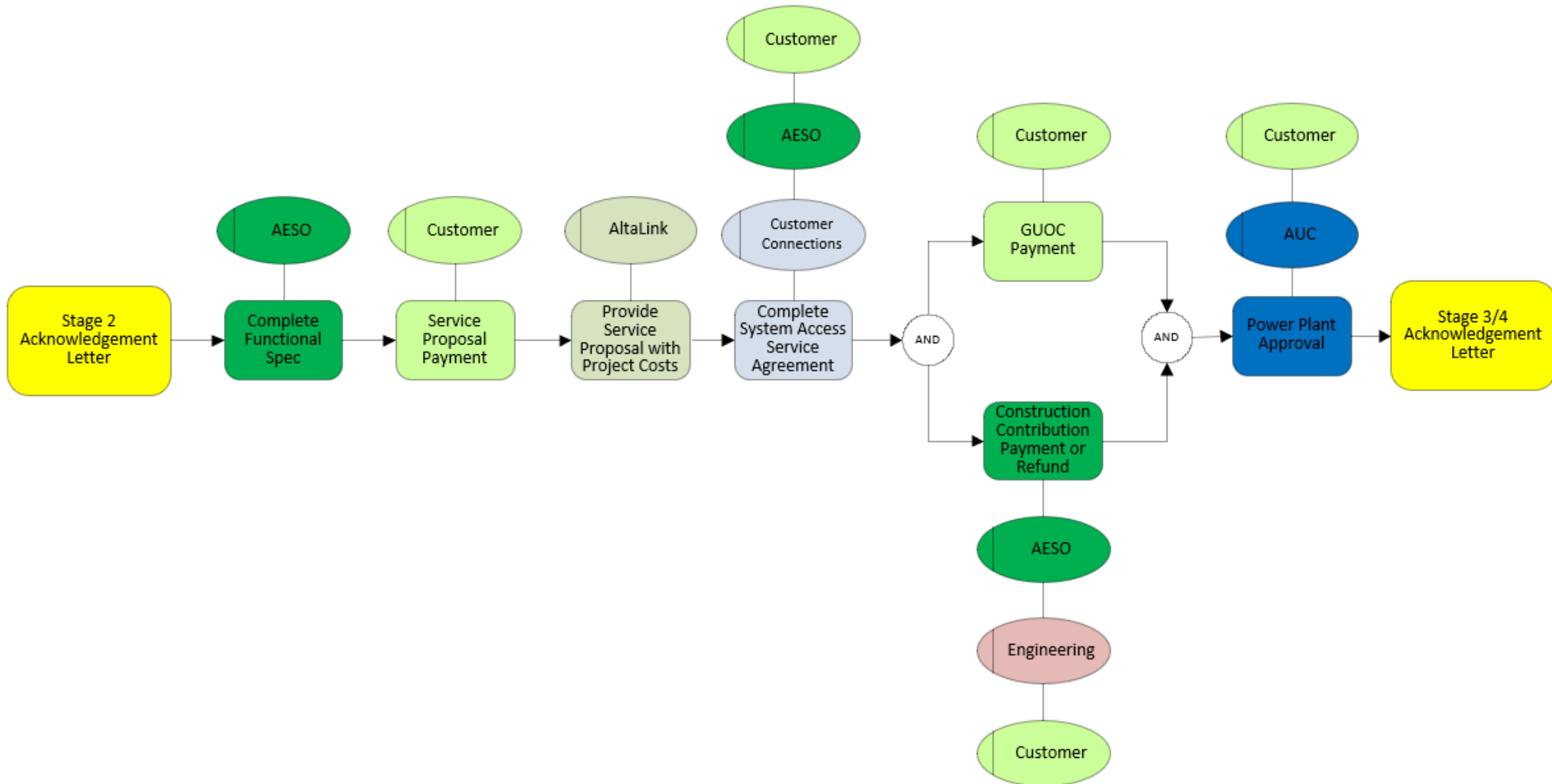
B8. Phase 3.3.1 AESO Behind the Fence Stage 1



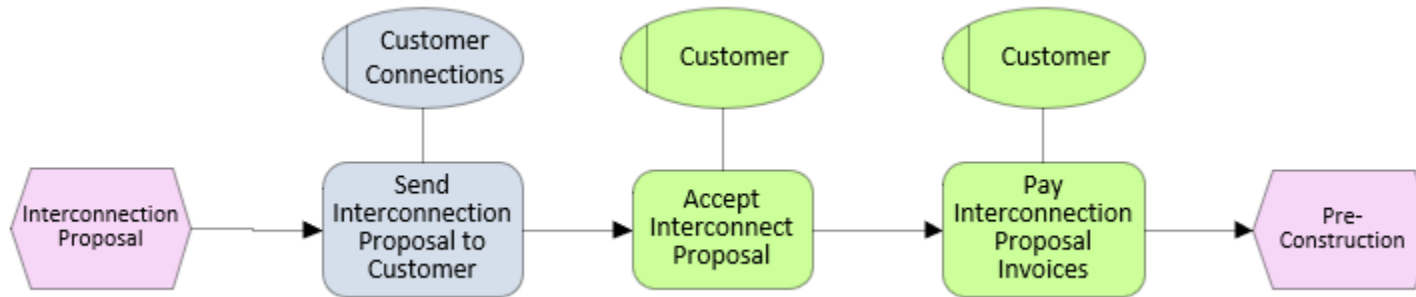
B9. Phase 3.3.2 AESO Behind the Fence Stage 2



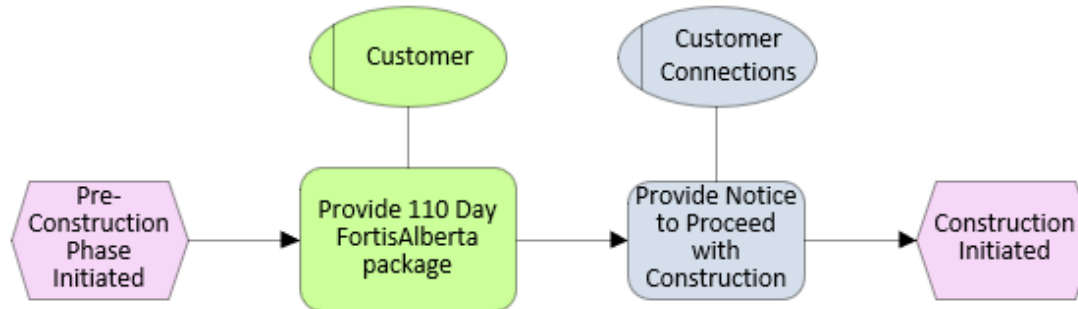
B10. Phase 3.4.3/4 AESO Behind the Fence Stage 3 & 4



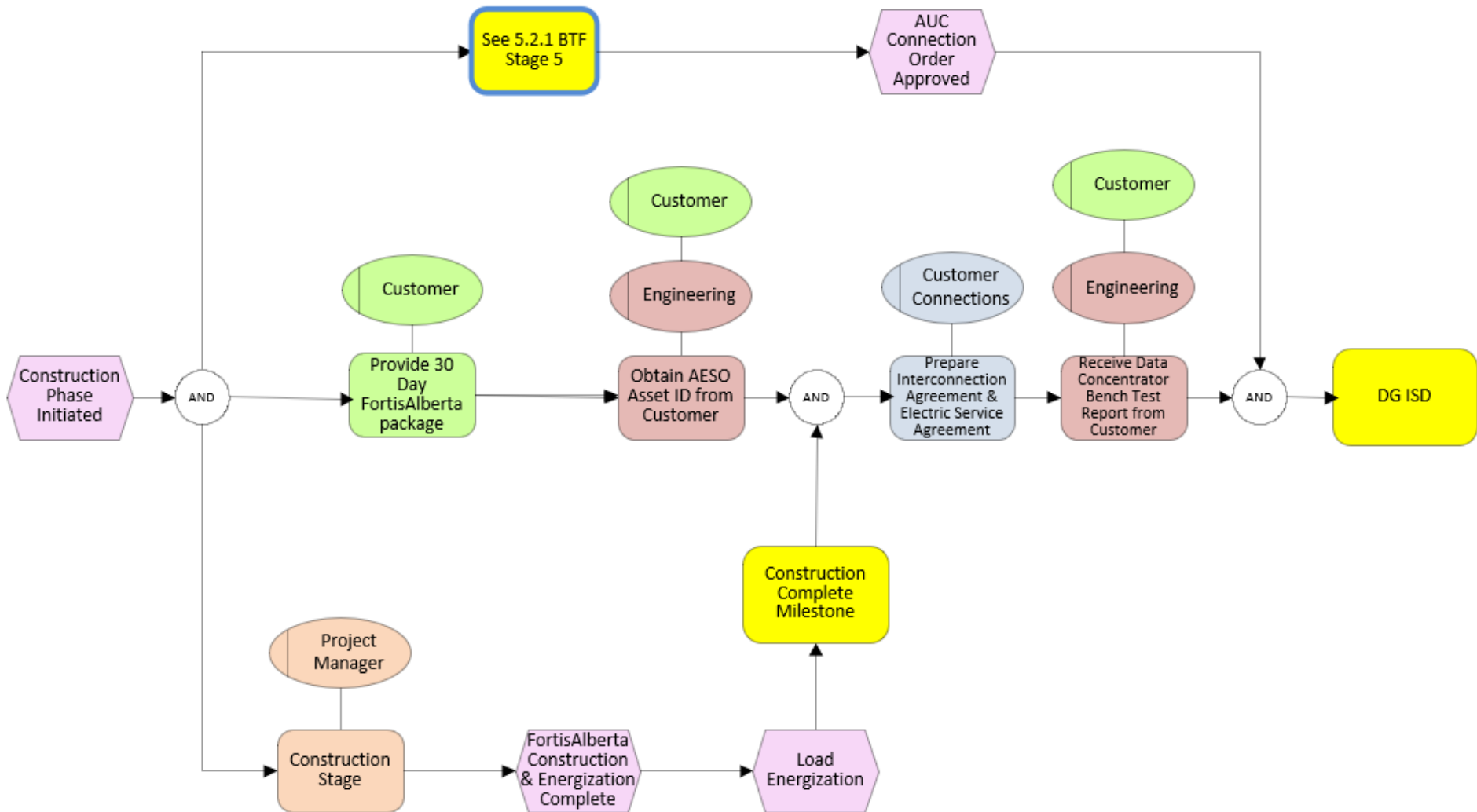
B11. Phase 4 Interconnection Proposal



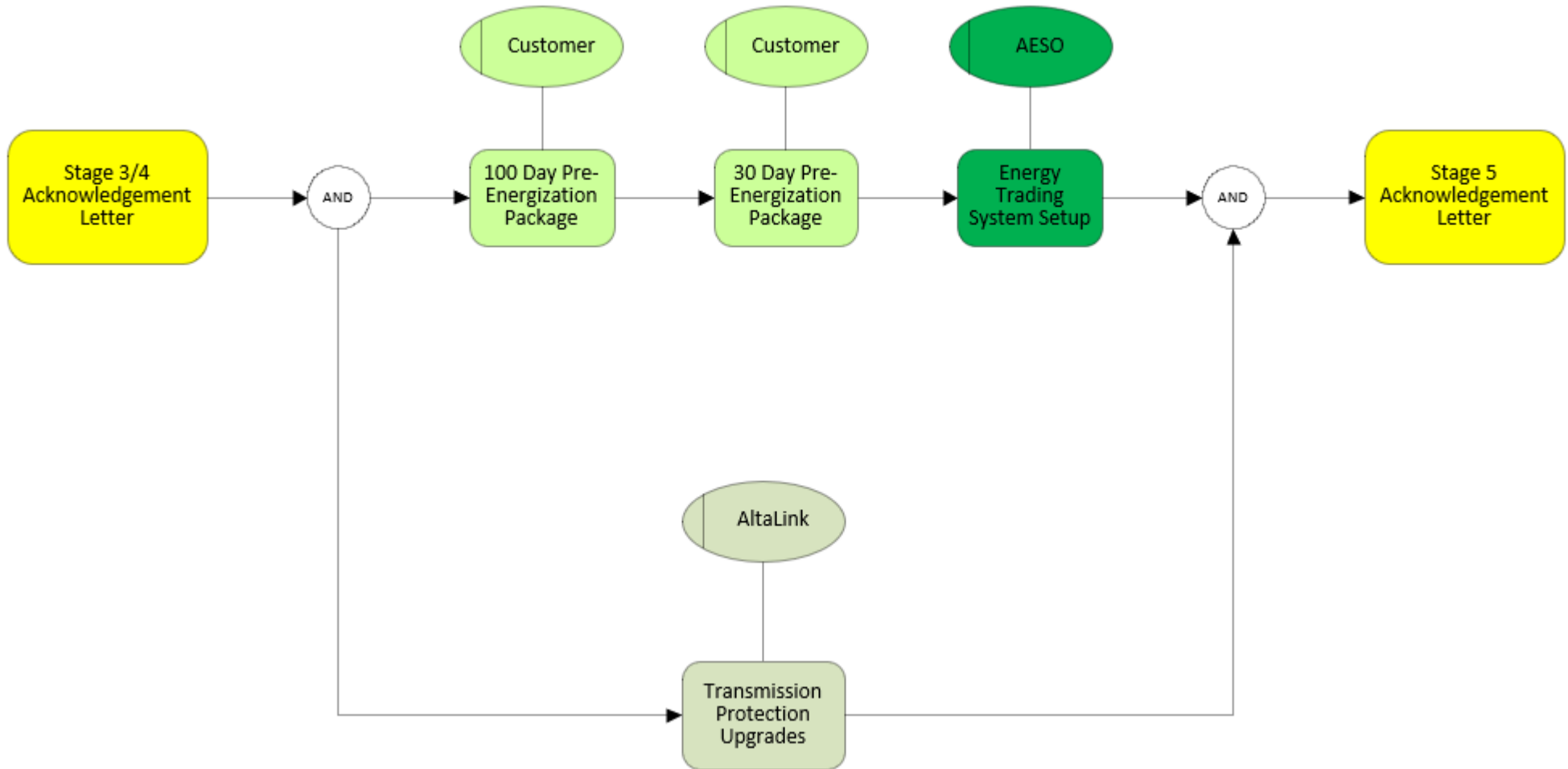
B12. Phase 5.1 Pre-Construction



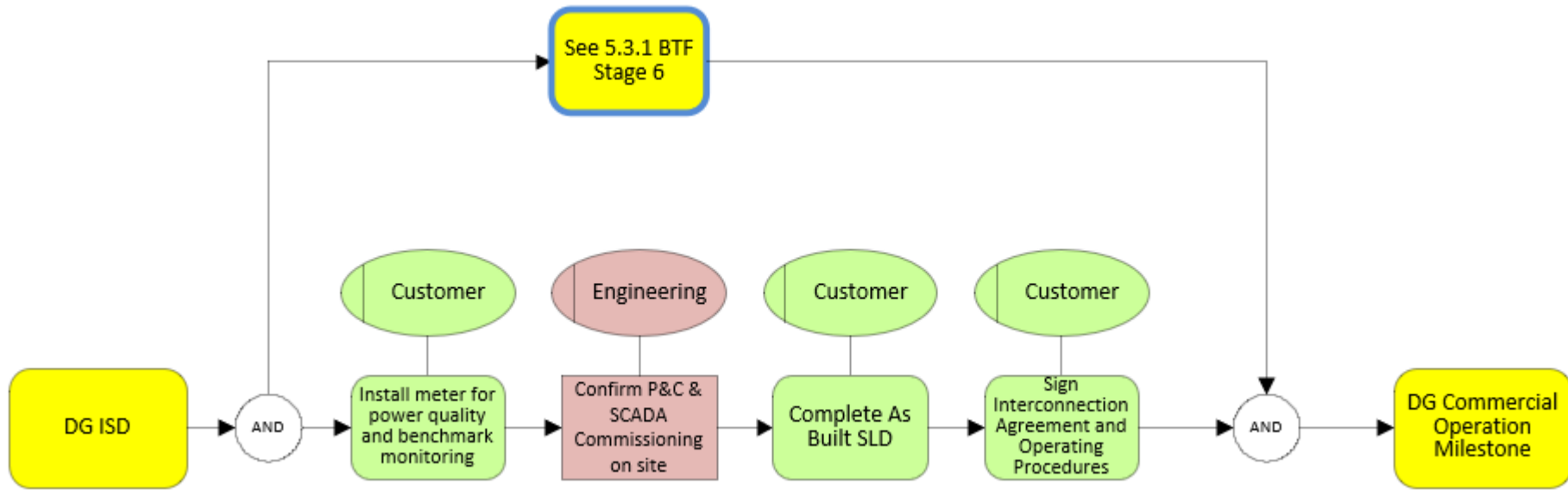
B13. Phase 5.2 Construction



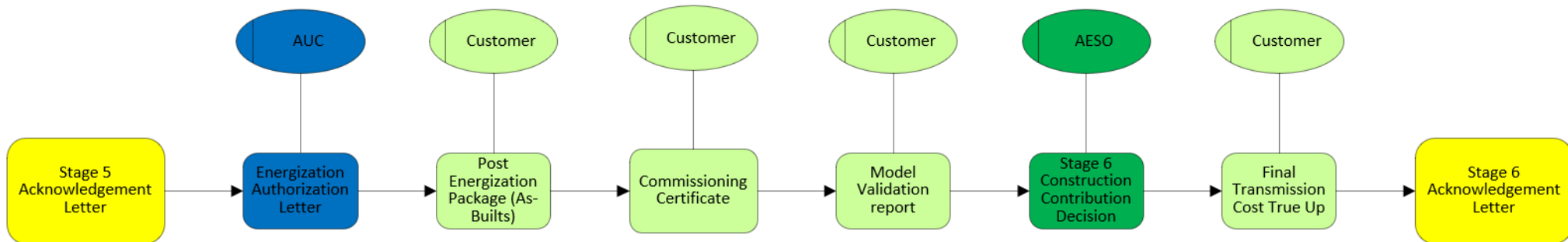
B14. Phase 5.2.1 AESO Behind the Fence Stage 5



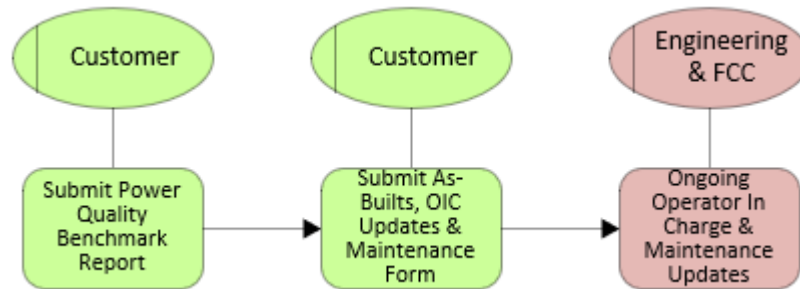
B15. Phase 5.3 Commission



B16. Phase 5.3.1 AESO Behind the Fence Stage 6



B17. Phase 6 Operate



Annex C Documents and Forms (Informative)

[Distributed Generation Library | FortisAlberta](#)

[FortisAlberta Customer Generator Options](#)

[DER Pre-application Form](#)

[Third-Party Authorization Distributed Generation](#)

[High Level Study Application](#) in [Distributed Generation Library | FortisAlberta](#)

[Detailed Level Study Application](#) in [Distributed Generation Library | FortisAlberta](#)

[DER-02 FortisAlberta Interconnection Requirements](#)

[FortisAlberta Interconnection Document Requirements](#)

[FortisAlberta DER Interconnection Checklist](#)

[Interconnection Protection Settings and Commissioning \(IPSC\)](#)

[Sample – Interconnection Protection Settings and Commissioning \(IPSC\)](#)

[Maintenance Verification Report](#)

[Sample – Maintenance Verification Report](#)

[Option M – Distributed Generation Charges and Credits](#)

[DER IFC Data Requirements](#)

[As-Built Generator Parameters](#)

[FortisAlberta Engineering Study Requirements](#)

[FortisAlberta Effective Grounding Study Requirements](#)

Alberta Electric System Operator (AESO)

[Connecting to the grid » AESO](#)

<https://www.aeso.ca/assets/DER-Ride-Through-Performance-Recommendations.pdf>

Annex D Glossary of Acronyms (Informative)

FortisAlberta

DER:	Distributed Energy Resources (DGs, MGs, etc. connecting to the distribution system)
DG:	Distributed Generation
MG:	Micro-Generation
DLS:	Detailed Level Study
Energize:	power to site
ESA:	Electrical Service Agreement
FCC:	FortisAlberta Control Centre
HLS:	High Level Study
IA:	Interconnection Agreement with Operating Procedures agreement
ISD:	In-Service Date (DER exporting onto FortisAlberta system)
OIC:	Operator-in-Charge
OP:	Operating Procedures
PCC:	Point of Common Coupling
P&C:	Protection and Control
SCADA:	Supervisory Control and Data Acquisition
SSG:	Small Scale Generation
TFO:	Transmission Facility Owner

Alberta Electric System Operator (AESO)

AESO Acronym list: [Behind the Fence \(BTF\) Process » AESO](#)

BTF:	Behind the Fence
EC:	Energization Checklist
ESR:	Engineering Study Report
FS:	Functional Specification
GUOC:	Generator Unit Owner Contribution
MARP:	Maximum Authorized Real Power
PDUP:	Project Data Update Package
SAS:	System Access Service
SASA:	System Access Service Agreement
SASR:	System Access Service Request
STS:	Supply Transmission Service

Transmission Facility Owner (TFO)

PPS:	Proposal to Provide Service (costs for approval)
SOW:	Scope of Work