# Owners Engineering Services for North Atlantic Green Energy Hub

## REQUEST FOR PROPOSAL (RFP)

For additional information please contact Jeff Murphy at jeffmurphy@northatlantic.ca

Closing Date: March 27th, 2026 by 5 pm NST

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| **Date** | **Rev.** | **Status** | **Prepared By** | **Checked By** | **Approved By** |

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## Acronyms

| Acronym | Definition |
|---|---|
| BFD | Block Flow Diagram |
| BOE | Basis of Estimate |
| BoP | Balance of Plant |
| CAPEX | Capital Expenditure |
| DOR | Division of Responsibilities |
| EPC | Engineering, Procurement, Construction |
| EPCM | Engineering, Procurement, Construction Management |
| EPF | Engineering, Procurement, Fabrication |
| FEED | Front End Engineering Design |
| HAZID | Hazard Identification |
| HAZOP | Hazard and Operability Study |
| HGP | Hydrogen Generation Plant |
| HSSE | Health, Safety, Security, and Environment |
| IP | Intellectual Property |
| ISBL | Inside Battery Limits |
| LOHC | Liquid Organic Hydrogen Carrier |
| MCH | Methylcyclohexane |
| NARC | North Atlantic Refining Corp. |
| NL | Newfoundland and Labrador |
| OE | Owner's Engineer |
| OEM | Original Equipment Manufacturer |
| OPEX | Operational Expenditures |
| OSBL | Outside Battery Limits |
| PEM | Proton Exchange Membrane |
| P&ID | Piping and Instrumentation Diagram |
| PFD | Process Flow Diagram |
| PMT | Project Management Team |
| QA/QC | Quality Assurance and Quality Control |
| QRA | Quantitative Risk Assessment |
| RFI | Request for Information |

| Acronym | Definition |
|---|---|
| RFP | Request for Proposal |
| SIS | Safety Instrumentation System |

# 1 Introduction

## 1.1 Project Overview

North Atlantic Refining Corp. (“NARC” or North Atlantic) is developing an integrated wind-to-hydrogen-to-LOHC export system centred on the Come By Chance industrial site in Newfoundland and Labrador, with dehydrogenation facilities in Europe (“The Project”). The Project will produce low-carbon hydrogen using wind generation and associated grid interconnections, convert the hydrogen into methylcyclohexane (MCH) using toluene as a Liquid Organic Hydrogen Carrier (LOHC), and export MCH via existing marine terminal infrastructure to European receiving terminals for dehydrogenation and injection into regional hydrogen networks.


*Figure 1-1: North Atlantic Wind to Hydrogen Project Layout Come By Chance, NL*

The Project is split into four main areas:

- Wind Farm, Transmission Lines and 35 /138 KV Substation at wind side and 138/35 KV substation on Hydrogen side.
- Hydrogen Generation Plant (HGP) and 480 V Unit Sub-Substation

- LOHC Plant – Hydrogenation at Come by Chance, Newfoundland and Labrador (NL) area.
- LOHC Plant – Dehydrogenation at user location in Europe.

The wind farm consists of approximately 43–55 utility-scale turbines, each rated about 7 MW, providing an installed capacity of roughly 320 MW for annual hydrogen production of 30 kTPA. The site includes about 60 km of access roads and a 34.5 kV collector system, designed using regional wind and topographic data. Foundations are engineered to support large-capacity tower cranes for turbine assembly and maintenance.

A 138 kV transmission line, approximately 25 km in length, connects the wind farm to HGP and Hydrogenation Plant under a behind-the-meter configuration. Supplemental grid supply from the Sunnyside substation provides additional reliability for hydrogen production and hydrogenation operations.

The HGP will comprise of modular PEM (Proton Exchange Membrane) electrolyzer units, organized into multiple arrays totaling about 240 MW of electrolysis capacity for annual hydrogen production of 30 kTPA. Each array includes several electrolyzer cabinets integrated with rectifiers, transformers, and process auxiliaries.

The LOHC plants will employ a toluene–MCH carrier system using licensed commercial technology. Existing hydrocarbon storage tanks, pipelines, and jetty facilities at the North Atlantic Terminal will be repurposed for LOHC handling. The hydrogen-laden LOHC will be shipped to a dehydrogenation facility in [redacted] where hydrogen will be released and injected into the European hydrogen pipeline network for final delivery to offtakes.

## 1.2 Project Front End Engineering Design (FEED) Strategy

North Atlantic is moving forward with the execution of the Front-End Engineering Design (FEED) Study for the Project. Execution of the FEED Study will be split into four distinct work scopes to be executed under four separate engineering contracts:

1. Come By Chance Terminal and Storage Tank Modifications
2. Wind Farm and Transmission Line
3. Hydrogen Production and LOHC Balance of Plan (BOP)/Outside Battery Limits (OSBL)
4. LOHC Inside Battery Limit (ISBL)

Together, these FEED studies will establish the basis for supply contracts for electrolyzer and wind Original Equipment Manufacturers (OEMs), Engineering, Procurement, Fabrication (EPF)

contractor for LOHC Licensors, and Engineering, Procurement, Construction (EPC) contracts to execute the wind farm and BOP/OSBL scopes. See Figures 1-2 and 1-3 for high level Block Flow Diagrams (BFD) outlining the boundaries for FEED scopes of work for both the Come By Chance and European Facilities.

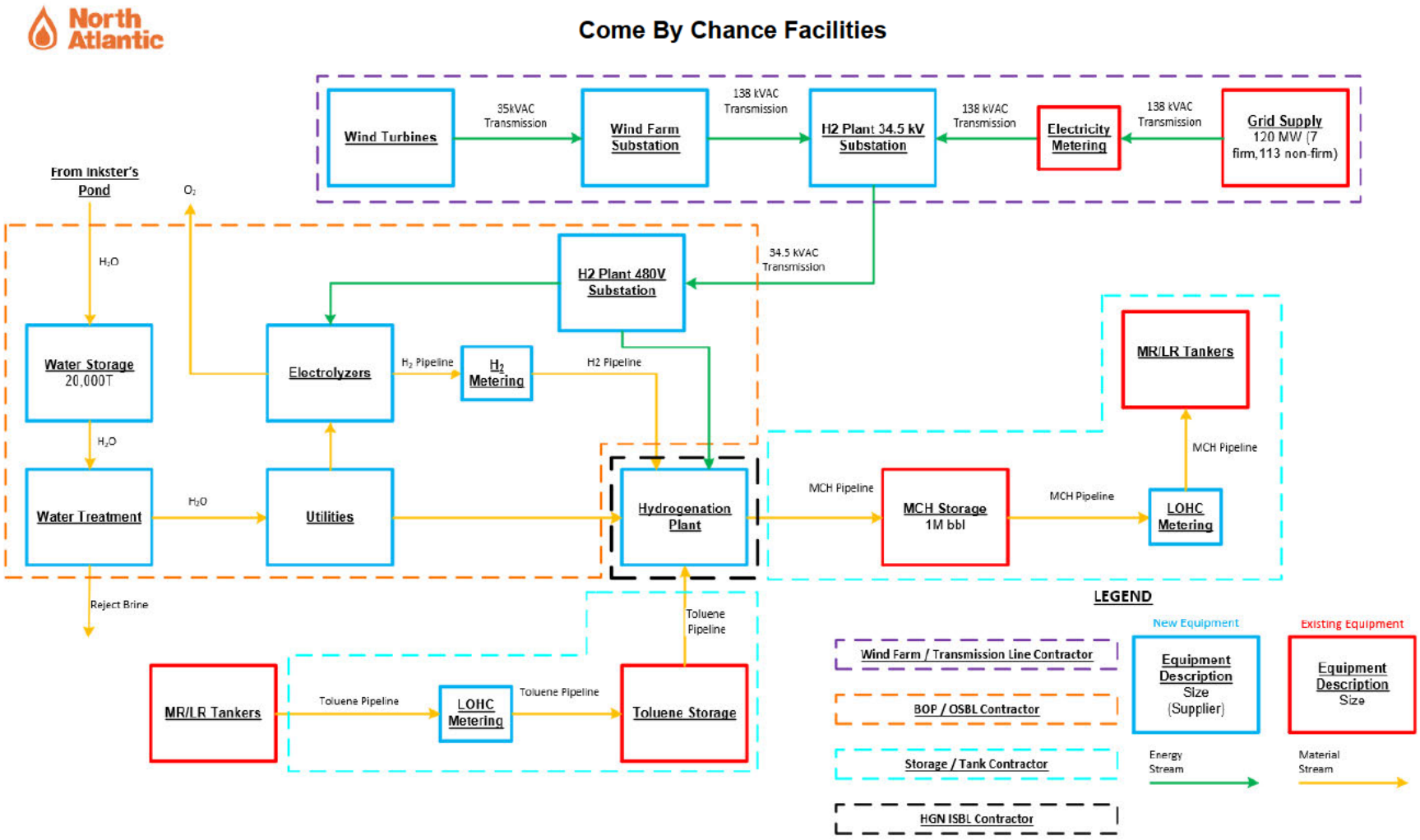


*Figure 1-2: Come By Chance FEED Scopes BFD*

North Atlantic

## European Facilities

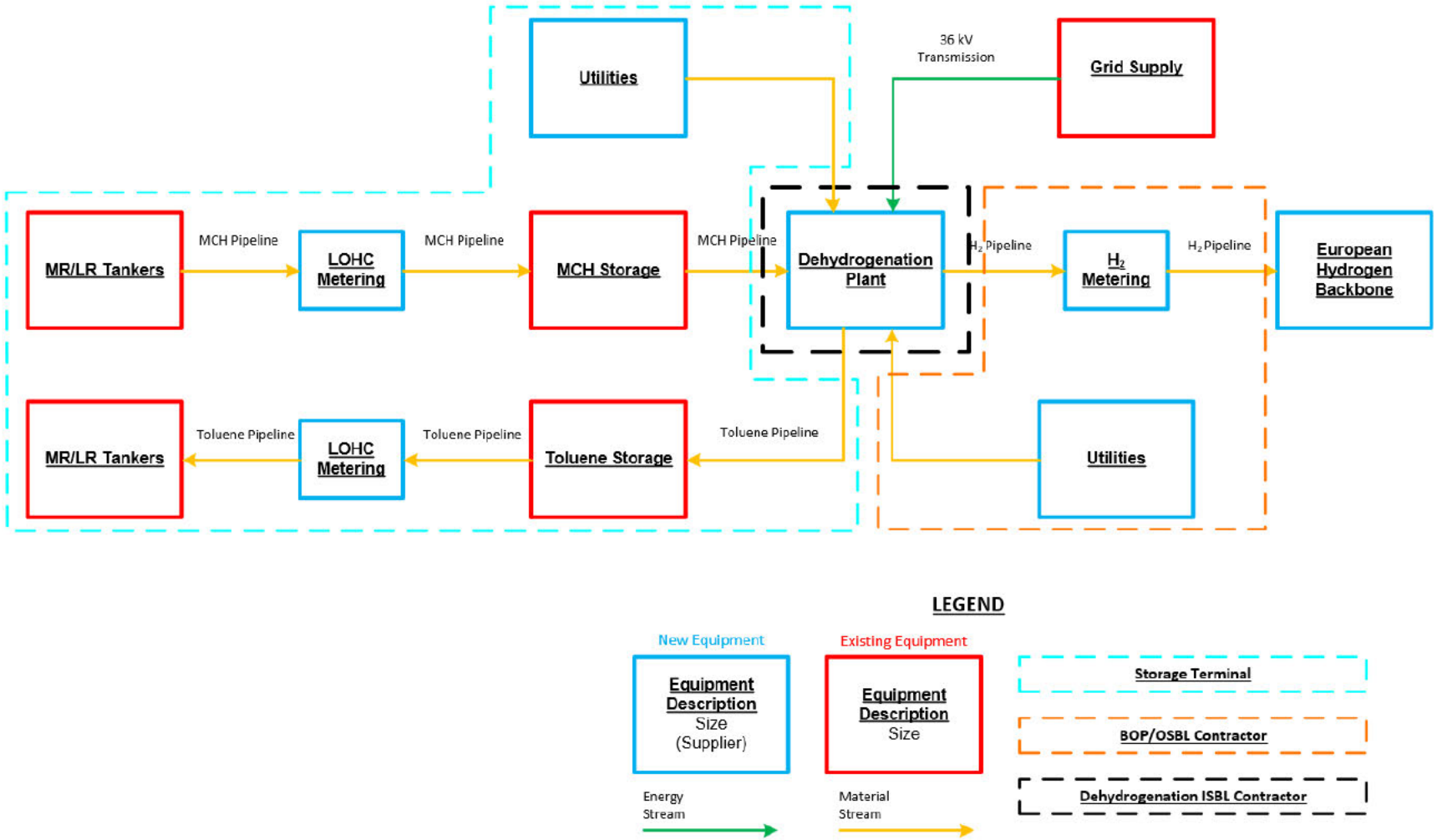


*Figure 1-3: Dehydrogenation FEED Scopes BFD (Europe)*

Requests for Proposals (RFPs) for scopes 2 through 4 have been released and have been attached to this RFP for reference in Attachments 1, 2, and 3.

A Project Management Team (PMT) will be created to coordinate and manage the execution of the various FEED scopes. The PMT will bear the responsibility for overall project delivery. The PMT will work closely with FEED contractors, OEMs, and Licensors to integrate the designs for each portion of the project described above into one cohesive, overall project design. The PMT responsibilities will also include interface management, project controls (including cost and schedule stewardship, and change management), and project reporting throughout the engineering, procurement and construction phases.

The PMT will be an integrated team comprised of Owners employees, and personnel provided by an Owner's Engineer (OE). The PMT organisational chart is shown in Figure 1-4.

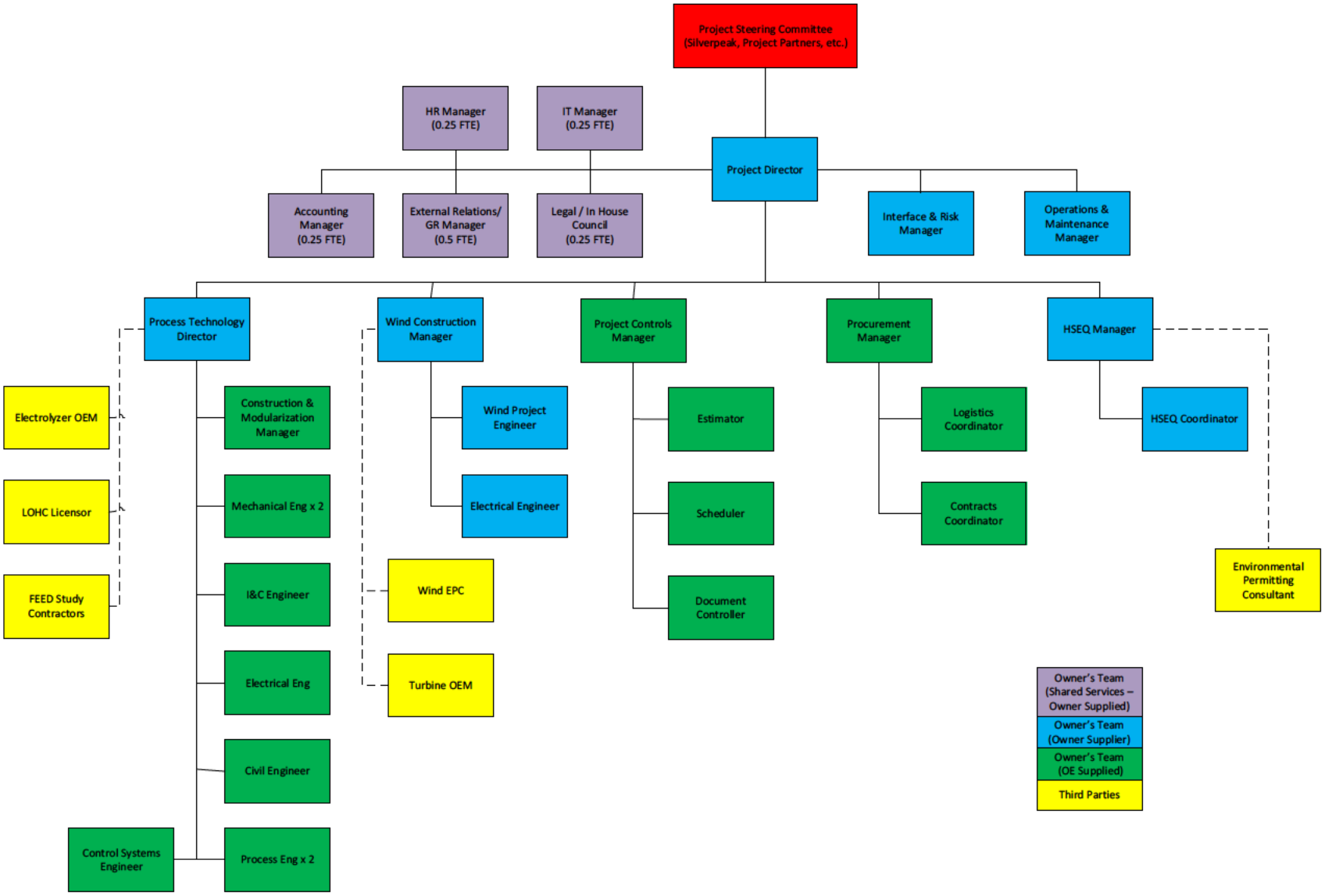


*Figure 1-4: Project Management Team Organization Chart*

## 1.3 Purpose of Request for Proposal

The Owner (North Atlantic) is soliciting proposals for an Owner's Engineering (OE) contractor to provide the personnel to support an integrated FEED PMT as outlined in Figure 1-4 – *Project Management Team Organization Chart*. OE representatives on the PMT will be expected to specify technical and functional requirements for engineering, procurement, construction, execution, and commissioning, as required relative to the Project FEED study. The OE contractor will also be expected to assist North Atlantic and PMT in developing other potential Market-based options, such as providing financial evaluation, due diligence review and the full range of OE services relative to the Project. The OE contractor must be a firm with multidiscipline engineering capability, significant industry experience similar in nature to the Project and prior work history in Canada and Western Europe.

This RFP outlines the project scope, requirements, and the terms under which the proposals are solicited and provides the information necessary for bidders to prepare and submit comprehensive proposals that address the technical and commercial requirements for functioning as the Project OE.

Unless otherwise agreed in writing, partial proposals (e.g., functioning only as OE for the LOHC portion of the project) will not be generally considered. Bidders shall assume responsibility for all scope elements described herein and in the RFP attachments. However, North Atlantic keeps it's right to entertain the partial proposals if they add value to the overall project.

All information provided in proposals shall be non-proprietary and free of any company-specific branding or references. Bidders are expected to use globally accepted standards and terminology in their submissions. Any assumptions or exceptions should be clearly stated. North Atlantic reserves the right to award contracts to a bidder, to negotiate scope and terms, or to make no award as a result of this solicitation. By participating in this RFP, bidders acknowledge and agree to abide by the terms and conditions outlined herein.

## 1.4 Scope Boundaries and External Interfaces

The FEED studies listed in Section 1.2 (i.e., the Come By Chance Terminal and Storage Tank Modifications, Wind Farm and Transmission Line, Hydrogen Production and LOHC BOP/OSBL, LOHC ISBL) and the terminal and storage infrastructure on the Dehydrogenation plant side are not part of the scope for this RFP. The OE contractor shall treat the third parties executing these scopes of work as external interfaces.

# 2 Scope of Services

The scope of work for the PMT, and thus OE representatives within the PMT, encompasses the oversight and management of contractors engaged for the performance of the FEED study scopes described in Section 1.2 and to merge the outputs from the individual FEED study scopes into one, cohesive, overall design concept for the project. The overall PMT scope includes but not limited to manage FEED execution work performed by FEED contractors which includes review of deliverables, attending various design and safety meetings as outlined in FEED RFP, review any change orders and provide feedback to North Atlantic management, manage overall progress of the project and provide direction to the project to maintain overall project schedule and cost. The scope of work also includes supporting the development of EPC technical RFPS towards the back end of FEED, as well as supporting the EPC bid period and technical evaluation through to recommendation of preferred EPC contractor(s). The method and requirements for the PMT and OE to do so are outlined in the following subsections.

## 2.1 Location(s)

North Atlantic has secured sufficient space for the PMT at its office located at 131 Kelsey Drive, St. John's, NL (PMT home office). Owner's Employees that are members of the PMT will work out of that location. North Atlantic is flexible on the location for members of the PMT supplied by the OE and will entertain the option for OE PMT members to work from satellite offices or from the FEED contractor offices. RFP respondents will be permitted to present both options to North Atlantic as part of their proposal.

## 2.2 Summary of OE Capabilities and Requirements

OE representatives on the PMT shall be capable of providing the services listed below in accordance with the corresponding subsections. All OE scope described in Section 2.2 and all of its subsections shall be provided in the context of the OE working collaboratively with Owner's representatives as part of the integrated PMT.

Scope of Services includes but is not limited to:

- Project Cost Estimate Development and Support (Section 2.2.1)
- Project Schedule Development and Support (Section 2.2.2)
- General Permitting Support (Section 2.2.3)
- Equipment Specification and Procurement Support (Section 2.2.4)

- FEED Contractor and OEM Management Support (Section 2.2.5)
- EPC Contractor Specification and Procurement Support (Section 2.2.6)
- Document Management Support (Section 2.2.7)
- Technical Assurance of Detailed Design Drawings and Documentation (Section 2.2.8)
- Health, Safety, Security and Environment (HSSE) Support (Section 2.2.9)
- Other Technical Specification Support (Section 2.2.10)
    - Construction Support and Evaluation of Adherence to Specifications and Quality Assurance
    - Reference other OE expectations and requirements as stated throughout this specification

It is the Owner's intention for the PMT to be responsible for development of the items/scopes listed in Sections 2.2.1 through 2.2.10. However, the Owner requests that bidders provide their 2026 rate sheets in the event additional support is required to complete all items required and as directed by the Project Steering Committee / Project Director.

### 2.2.1 Project Cost Estimate Development and Support

- Integrate cost estimates from FEED contractors and OEMs and develop comprehensive estimates for overall scopes of work. Estimates shall include equipment, commodities, materials, installation labor, design engineering, start-up and commissioning engineering support, and construction management/field engineering.
- Estimates shall be developed to show overall project costs as well as the projected monthly cash flows for the life of construction, commissioning and operational phases of the project.
- Provide periodic updates to project estimates to help PMT with cost forecasting efforts.

### 2.2.2 Project Schedule Development and Support

- Develop and maintain an Integrated Project Schedule for the life of the Project by combining the individual schedules provided by FEED contractors utilizing scheduling software to be mutually agreed upon by the Owner and the OE.
- As part of coordination with FEED/OEM contractors, OE must deliver reviews, comments and PMT decision inputs within an agreed number of working days from receipt of FEED/OEM submissions, such that OE does not drive critical path delay to the agree FEED milestones.

### 2.2.3 General Permit Support Capabilities

- Perform, or support third party contractors in performing all work required to obtain site permits necessary for the construction, commissioning and operational phases of the project. This includes all environmental assessment, water, wastewater, storm water, air and construction permits.
- Drawing preparation for permitting – Generate drawings as required, but not provided under third party FEED study scopes, showing project specific details to facilitate permitting support efforts.
- Provide technical support for Legislative and Regulatory activities required under applicable Federal and Provincial laws.
- Owner (with specialist consultants) is accountable for preparing and submitting permit applications and managing regulatory engagement, while OE/PMT is responsible for providing and validating technical input (data, drawings, calculations, response to regulator RFIs) and confirming that FEED designs comply with permit conditions.

### 2.2.4 Equipment Specification and Procurement Support

- Develop equipment technical and procurement specifications for long lead equipment to be procured directly by the Owner. This includes, but is not limited to wind turbines, electrolyzers, high voltage power equipment, and modular LOHC facilities.
- Equipment Contract Bid Process
    - Support PMT in the Equipment Contract Bid Process by:
        - Assisting in incorporating specifications into Owner bid documents,
        - Attending pre-bid meetings,
        - Preparing and issuing bid addenda to Technical Specifications,
        - Manage and provide timely responses to requests for information (RFI) during the bid process,
        - Develop responses to bidder's technical inquiries,
        - Submit and track responses by bidders,
        - Develop evaluation matrix criteria.
- Equipment Bid Evaluation
    - Review and evaluate the commercial and technical proposals submitted by the Equipment Contract bidders to confirm the minimum requirements of the project are satisfied:

- Review the bidders' commercial and technical proposals, including exceptions and clarifications, supporting documentation, drawings, and plans as presented in bidders' proposals.
- Evaluate the bidders on the strengths of their Quality Assurance / Quality Control (QA/QC) manual, fabrication/ manufacturing execution plan, and references.
- Work to determine which bidder clarifications and exceptions are acceptable.
- Solicit proposal clarifications and adjustments from the bidders to address incomplete or ambiguous proposal items and unacceptable exceptions.
- Develop bid tabulations comparing the commercial and technical offerings between short-listed bidders.
- Provide recommendations based on the technical offerings and any other requirements.

- Work collaboratively with Owner on the bid review and evaluation tasks.
- Engage Owner in the evaluation process that shall ensure a well-explained, detailed, and documented evaluation.
- Confirm the technical specification for contract based off the final negotiations conducted by Owner and the successful bidder. The conformed specification shall incorporate the agreed upon changes to the bid specification.

### 2.2.5 FEED Contractor and OEM Management Support

- Kick-off and Status Update Meetings
  - Manage kick-off and status meeting conference calls. It is anticipated that meetings will be attended by relevant PMT staff, and that the meetings will focus on critical issues, FEED and equipment supplier(s) document submittals, open action items, project schedule status, RFIs, and FEED contractor progress (actual and planned). Establish the meeting agendas, record, and distribute meeting minutes, lead the discussion of current issues, maintain an action item list, and perform all other tasks necessary to keep Owner well informed.
  - Periodically the Status Update Meetings shall be conducted as "in-person" meetings. The location and scheduling of the "in-person" meetings shall be mutually agreed upon by PMT and FEED Contractor.

- Provide status reports documenting the tasks performed, tasks planned, detailed man-hour and cost accounting information, status of the overall project schedule review, and additional information needed to keep North Atlantic well informed about the work being performed by the FEED/OEM Contractor. The report shall detail the tasks performed for the current month and planned upcoming tasks. Also included shall be statistics that track progress on document reviews, RFI responses, vendor shop and field surveillances, and other information needed to keep the Owner well informed.

- Project Schedule Management
  - Review the OEM and FEED contractor's schedules for compliance with the specification requirements, for the proper integration with project milestones and work by others, and for reasonableness. Monitor their progress for all phases of the work, including verifying the actual progress versus the reported progress. In addition, the risks and critical paths associated with the schedule, schedule float, and schedule forecasts shall be monitored and maintained. Expedite the supplier and the FEED contractor, as needed, for the submittal and updates of their schedules.
  - If the OEM or the FEED contractor falls behind schedule, assist in assessing the impacts and reviewing any recovery plans to determine whether they are likely to be effective.
- Review and Oversight of Construction, Commissioning and Startup Plans
  - Review the comprehensive Construction, Commissioning and Startup Plans that will be prepared by the FEED contractor and OEM Suppliers to ensure that it complies with the minimum requirements of the contract.
  - OE/PMT is responsible for technical adequacy review, constructability/operability input, and cross-package alignment.

### 2.2.6 EPC Contractor Specification and Procurement Support

- Assist in evaluating different EPC contracting and project execution strategies. Identify strengths, weaknesses and benefits associated with Owner's execution of each approach. Leverage current market experience to develop the most viable strategy for the Project.
- Assist in developing an EPC contractor specification based on previous similar project experience. When developing EPC contractor specifications, the objective is to specify the appropriate amount of information required for North Atlantic to obtain the desired facility

without placing too many restrictions on the EPC contractor's ability to provide an innovative design for the project.

- Develop a Division of Responsibilities (DOR) matrix in the planning phase of the project. The DOR matrix shall be continually updated throughout the life of the project, and shall be used to ensure that there are no gaps in scope between the equipment supplier(s), the EPC contractor, and any other contracts (such as FEED Contractor(s), electrical interconnection, water supply, etc.).
- EPC Contractor Bid Process
    - Support North Atlantic in the EPC Contractor Bid Process by:
        - Attending Pre-Bid Meetings
        - Assist North Atlantic in determining the EPC approach for the Project.
        - Prepare and Issue Bid Addenda to the Technical Specification
        - Manage and Provide Timely Responses to RFI During the Bid Process
        - Develop Responses to Bidder's Technical Inquiries
        - Submit and Track Responses by Bidders
        - Develop Evaluation Matrix Criteria
- EPC Contractor Bid Evaluation
    - Review and evaluate the technical proposals submitted by the EPC Contractor bidders to confirm the minimum requirements of the project are included:
        - Assist North Atlantic in determining best EPC contracting methodology.
        - Assist North Atlantic in performing an initial higher-level screening of bidders from the total number of bidders to a short list of bidders.
        - Assist North Atlantic in project development including scope development and negotiation with EPC contractors.
        - Assist North Atlantic with interface between owner purchased major equipment suppliers and EPC contractor.
        - Review the short-listed bidders' technical proposals, including exceptions and clarifications, supporting documentation, drawings, and plans as presented in bidders' proposals.
        - Evaluate the bidders on the strengths of their safety manual and record, QA/QC manual, construction execution plan, subcontractors, and references.
        - Work with North Atlantic to determine which bidder clarifications and exceptions are acceptable.

        - Solicit proposal clarifications and adjustments from the bidders to address incomplete or ambiguous proposal items and unacceptable exceptions.
        - Develop bid tabulations comparing the technical offerings between short-listed bidders.
        - Provide recommendations based on the technical offerings
    - Work collaboratively on the bid review and evaluation tasks.
    - Engage in the evaluation process that shall ensure a well-explained, detailed, and documented evaluation.
    - Conform the technical specification for contract based off the final negotiations conducted with the successful bidder. The conformed specification shall incorporate the agreed upon changes to the bid specification.

### 2.2.7 Document Management Support

- The PMT, with OE in the lead, owns the project-wide Document Management Plan (numbering riles, metadata, tools), and the FEED/OEM/EPC contractors must comply with that plan.
- Work with Equipment supplier(s), FEED and EPC Contractors to develop a documentation control plan and documentation control procedures to successfully control all documents generated during the project. The document control plan shall identify the stakeholders and the methods to be used for processing documents.
- The document control procedures shall provide specific details for document processing. The procedures shall include the method for submitting documents, commenting on documents, transmitting documents, and accessing current and previous document revisions.
- PMT will be tasked with monitoring and enforcing compliance, expediting late documentation, and closing the loop between “defining requirements”.

### 2.2.8 Technical Review of Detailed Design Drawings and Documentation

- As part of the detailed design effort required for project execution, the supplier(s) and FEED contractors may be responsible for developing calculations, P&IDs, single-lines, system architecture, construction drawings, procurement specifications, system descriptions, testing procedures, controls narrative, and other technical information. OE representatives shall be capable of reviewing these engineered design documents. The reviews shall focus on verifying conformance with the contract requirements including

scope, design adequacy, quality, compliance with applicable codes and standards, constructability, completeness, good engineering practice, and project technical specifications. OE representatives shall be capable of contributing to a Quality Assurance Plan, constructability reviews, and milestone approvals as needed based on completed technical reviews.

- Review the design documents that present aspects of plant operability and maintenance. This review process shall require periodic 3-D model-based design reviews with the FEED contractor to review the physical design and layout of the plant to ensure that adequate attention is being paid to operability and maintenance access.
- Compile and maintain a single, integrated FEED package for the Project, consolidating the FEED deliverables from all FEED contractors and OEMs (wind, HGP/BOP, LOHC ISBL/OSBL, terminal) into a coherent set of documents suitable for EPC tendering and FID.

### 2.2.9 Health, Safety, Security, and Environmental (HSSE) Support

- FEED contractors to perform HAZID/HAZOP, QRA and facility-level HSE deliverables. OE/PMT to define the HSSE framework and acceptance criteria, review/approve the safety studies, and ensure outcomes are reflected in the overall Health and Safety Plan.

### 2.2.10 Other Technical Specification Support

- Provide input to or perform independent review of Owners technical specifications and assumptions for the purchase of equipment as needed.
- Provide input to training programs for plant operators and maintenance personnel for new equipment and systems as required.
- Develop site-specific System descriptions as needed.
- Develop site-specific Operations procedures as needed.

## 2.3 Specific Capabilities of OE Supplied Personnel

The following sections outline areas in which personnel supplied by the OE should be experienced and proficient.

### 2.3.1 Drawing Requirements and Document Control

PMT, with OE in the lead, owns the project-wide Document Management Plan (numbering rules, metadata, tools). OE supplied resources on the PMT shall be capable of defining the requirements

for document control and define a Project Specific Document Management Plan. The OE shall provide access to its document management program and supportive procedures for use in developing the project specific plan.

Document Management

Site(s) managed by the PMT shall be established for the following:

- Drawing requests and other submittals
- Drawing and document templates, borders, and blocks
- Numbering of cables, instruments, equipment, valves, etc.
- New Project drawing numbers
- Drafting standards and guides
- Electronic copies of all documentation and drawings.

Professional Engineering (PEng) License Seals

- Design documentation such as design drawings, specifications, and calculations prepared by the PMT shall, to the extent required by Law or as defined by the PMT, have a PEng seal applied, signed, and dated by registered professional engineer(s).
- The license shall be current, valid, and in good standing in Newfoundland and Labrador.

Design Drawings and Documents

- Electronic Drawing Computer Aided Design (CAD) Requirements
    - Specify drafting services to be provided as part of the project scope. All drawing deliverables shall include the latest electronic file.
- Design Drawing Requirements
    - Produce new drawings or update existing drawings necessary to support detailed design.
    - Work with the PMT to identify design drawings to be created or edited.
    - Develop a review and approval process and process drawings into the document management system.
    - Work with PMT Document Control to search and locate all affected design drawings to be modified.
- Vendor, Manufacturer and Engineering Drawings

- Review all Vendor, Manufacturer, or Engineering drawings for Owner-purchased equipment and services.
- New or revised Project drawings, supplementing those produced by FEED Contractors, may be required to support a fully functional design.
- Review, collect, and upload Vendor and Manufacturer O&M Manuals

### 2.3.2 Quality Requirements

The PMT will review the quality management plan submitted by FEED Contractors and develop a Project Specific Quality Management Plan. The OE shall provide access to its quality management program and supportive procedures for use in developing the project specific plan.

### 2.3.3 Project Management

PMT Project Management

OE will provide one direct individual (not a member of the PMT) responsible for overall coordination between OE and Owner.

The PMT will be responsible for the development of a Project Specific Project Management Plan. The OE shall provide an access to its project management program and supportive procedures for use in developing the project specific plan. As part of the development of the Project Management Plan, the PMT will develop the following:

- Project Execution Plan
- Cost & Schedule Management Plan
- Communication Plan
- Quality Plan
- Risk Management Plan (the OE shall maintain a risk register throughout the project).
- A plan detailing how the OE will manage formal requests for information (RFIs) from North Atlantic and/or third parties such as contractors or vendors.
- Health and Safety Plan
- Environmental Management Plan
- Change Management Plan

As indicated in Section of 2.2, it is anticipated that the scopes of work listed in Section 2.3.3 may require OE support beyond that of members of the PMT.

Progress Reporting

The PMT will deliver progress reports to a Project Steering Committee as outlined in Figure 1.4. The Project Steering Committee will be comprised of Owner appointed representatives and other Project Stakeholders. Progress reports shall contain the following items, at a minimum: project stage, cost, schedule, quality, safety, risk, and upcoming week or month plan.

Progress meetings shall be scheduled to review and discuss progress reports at a regular frequency. The PMT will create and publish formal meeting minutes from each progress meeting that includes action items and summary of significant items as necessary.

### 2.3.4 Deliverables

The PMT will define the required deliverables and milestones from the FEED Contractors and OEM Equipment Licensors/Suppliers. The PMT will be expected to be involved in the design review process for all milestone submittals.

The PMT will be given time to review and comment on each deliverable for each stage of submittal. PMT reviews, comments and inputs should be delivered within an agreed number of working days from receipt of FEED/OEM submissions, such the PMT does not drive critical path delay to the agreed FEED milestones.

The PMT will be required to participate in design review meetings. The location for design review meetings shall be as agreed upon by the Owner and FEED Contractors and may require travel by one or both parties. The PMT will create and publish formal meeting minutes from each design review meeting that includes action items and summary of significant items as necessary.

### 2.3.5 Specification Requirements

The PMT will be required to review project specific specifications developed by Engineering Contractors (FEED & EPC) and for OEM equipment suppliers. The OE may be required to supply standard specifications or examples of past specifications in support of project specific specification development.

The PMT will be responsible for specification issue, bid, award, and administration phases. This will encompass all, or portions of, the following:

- Bid package assembly for each specification to include the Specification, drawings, attachments, appendices, and all relevant items.
- Attendance at pre-bid meetings as requested.
- Responding to technical and commercial bid queries.

- Support bid evaluations by reviewing bidder proposals and making recommendations.

### 2.3.6 Engineering Studies and Calculations

The PMT will be required to review and approve project specific Engineering Calculations and Engineering Studies submitted by FEED/OEM contractors. The OE may be required to supply standard calculation and study report templates in support of project specific calculation and study development.

Engineering studies will include the following items in a formal report, at a minimum:

- Objectives
- Design basis
- Design and calculation methodologies
- Assumptions and risks
- Alternatives and options
- Conclusions and recommendations
- Cost estimates if the study results in a project or scope of work
- All supporting documentation such as:
    - Calculations sheets
    - Drawings
    - Sketches
    - Computer modeling data/reports
    - 3D Modeling
    - References such as standards or industry practices

### 2.3.7 Engineering Discipline Specific Design Requirements

Personnel provided by the OE will be responsible for defining discipline specific engineering design requirements and appropriate codes and standards, as required. They shall be competent and capable in the following:

- Producing calculations as required to support the design of the project.
- Producing specifications as part of the project scope, as required per the scope of work.
- Computer Modeling and Simulation - All software to be utilized will be defined collaboratively by the OE and PMT.

# 3 Proposal Submission Requirements

Bidders shall prepare a clear and comprehensive proposal in response to this RFP. The proposal must be organized into two parts – a Technical Proposal and a Commercial Proposal – and should address all requirements outlined below. All proposals must be written in English with a professional and concise style, free of marketing fluff and extraneous information. Bidders should review Attachment 1 – Instructions to Bidders for details on proposal acceptance, clarifications and submission.

## 3.1 Technical Proposal

The Technical Proposal should detail the bidder's approach, experience, and capability for functioning as the OE. It should include:

- **Introduction and Understanding:** A brief executive summary of the proposal, outlining the bidder's understanding of the project and the RFP objectives. Highlight any unique aspects of the proposed approach to the supply of OE services.
- **Bidder Experience and Qualifications:** An overview of the bidder's relevant experience, particularly in functioning as the OE on projects of similar scope, size and scale. Include a summary of past projects or case studies (without referencing specific client names or locations) that demonstrate the bidder's capability to deliver OE services for the FEED and subsequent project phases for comparable process facilities. Bidder shall include an organization chart showing execution model with resource allocation and CVs of key project personnel.
- **Scope Execution Plan:** A detailed plan for how the bidder will supply OE services for integrated PMT services as well as carrying out OE work outside of PMT as mentioned in scope of work of the RFP. This should include the proposed project organization and team structure (identifying key personnel and their roles/qualifications). Provide a preliminary schedule for delivery of OE services. Describe type of digital tools or software and data environment typically used by the bidder in providing OE services (e.g. process simulation software, P&ID drafting, 3D modeling, etc.).
- **Deliverables and Quality Assurance:** Confirm understanding of the required OE Services (Section 2) and describe the bidder's internal quality assurance process to ensure services are completed to a high standard. If the bidder has standard templates as referenced in Section 2, the proposal may reference them (to be provided in the appendix of the proposal if needed).

- **Risk Management:** Identify any major risks or challenges foreseen in delivering the OE services for the FEED or the subsequent project phases and describe strategies to mitigate them.
- **FEED to EPC Transition:** Although the RFP is for FEED OE services and EPC RFP support, briefly describe how the bidder envisions the transition from providing OE services for the FEED phase to the EPC/M phase. Outline any continuity plan or advantages the bidder's organization offers for moving into the EPC/M phase. This section helps demonstrate the bidder's ability to support the project beyond FEED.
- **Assumptions, Clarifications and Deviations:** Contractor shall provide complete list of all the Assumptions, Clarifications, and Deviations to the RFP explaining the reasons with any benefits to the project.

The Proposal should be structured and paginated clearly, with a table of contents and section headings corresponding to the points above. All pages should be numbered. Any confidential or proprietary content in the proposal should be minimized and, if necessary, clearly marked.

## 3.2 Commercial Proposal

The Commercial Proposal must contain all relevant financial and commercial information. It should include, at a minimum:

- **Pricing:** Hourly/unit rates for resources to be provided by the OE in delivering the required work scopes. Prices should be inclusive of all labor, subcontracts, licenses, software, travel, overheads, and profit. Proposal shall clearly mention the main execution center and offshore or high value center cost breakdown and manhour costs. Refer to Form C-1 in Attachment 5 for indicative rate schedule.
    - Contractor shall include the pricing in a specified currency (e.g. CAD is preferred) and whether it is subject to any exchange rate conditions or inflation adjustments if the FEED extends over a certain time along with all the tax considerations. Contractor shall also specify foreign exchange assumptions for USD or EUR exposed costs.
- **Commercial Terms and Exceptions:** A clear statement of compliance with the RFP's commercial and contractual terms (Section 7). The bidder should explicitly confirm acceptance of the draft contract terms provided in the attachments or enumerate any exceptions or deviations they propose. Any exceptions to terms will be considered in the evaluation and may affect the bidder's standing.

- **Technology Licensing and Royalties:** If the bidder's proposal involves any proprietary technology licenses, the Commercial Proposal should outline the intended licensing terms or fees. This includes any one-time license fee for the technology usage. These costs can be presented as part of the proposal or as separate information but must be clearly disclosed for North Atlantic's consideration.
- **Future EPC Phase Commitments:** While not required at this RFP stage, the bidder may provide any indicative proposal or commitments for the EPC phase to demonstrate the competitiveness of their overall offering. For example, the bidder can indicate their openness to a lump-sum contract or other execution models and provide a cost estimate based on current knowledge. Such information, if provided, will be treated as indicative and used to understand the bidder's full project capability.
- **Validity and Schedule:** State the validity period of the proposal (which should be sufficient to cover the RFP evaluation and award period, e.g. 90-120 days). Also confirm the bidder's availability to commence work immediately upon award and any assumptions on schedule. All Commercial Proposals must be submitted separately from Technical Proposals (e.g. in a separate file or sealed envelope if physically delivered) to ensure objective evaluation. No pricing information should appear in the Technical Proposal. Proposals should be submitted by the deadline specified by North Atlantic, in the manner (electronic portal/email) indicated. Late submissions or submissions that do not follow the requirements may be disqualified. Each bidder is responsible for ensuring their proposal is complete and compliant with all requirements of this RFP.

# 4 Technical Deliverables (FEED Outputs)

By the conclusion of the FEED phase, the FEED contractors will have produced a comprehensive set of technical deliverables. These deliverables will form the basis for the project's investment decision and the input to the EPC phase. The PMT will be responsible for the review and approval of these deliverables and ensuring the deliverables from the individual FEED scopes are combined into one cohesive project design and for any interface deliverables required to do so. The required FEED deliverables as mentioned in the FEED RFP are enclosed in the OE RFP attachments. Some of the deliverables are provided below.

- **Design Basis Memorandum:** A complete Basis of Design document covering all key design criteria for the project. This includes all the utilities supply and design parameters (quality, temperature, pressure etc.…), design capacity, site conditions (environmental

data, utilities available, design ambient conditions), and any specific client requirements or standards to be adhered to. This document will be the reference for all subsequent design work.

- **Process Flow Diagrams (PFDs):** Diagrams for hydrogen facilities, LOHC facilities, and all utilities and offsites showing all major equipment and process / utility streams. Accompanied by corresponding detailed heat and material balance sheets for each major operating case (e.g. normal operation, turndown, startup/shutdown as relevant).
- **Piping and Instrumentation Diagrams (P&IDs):** Issued for Design P&IDs for hydrogen facilities, LOHC facilities, and all utilities and offsites accompanied by line lists. These should illustrate equipment items, piping, instrumentation, control loops, safety valves, and interlocks. Each FEED package should have complete P&IDs that will later be refined in detailed design.
- **Equipment Datasheets and Specifications:** Issued for Design datasheets for all significant equipment, including, pumps, compressors, heat exchangers, pressure vessels, storage tanks, fired heaters, package units and filtration or purification units. Each datasheet should specify design and operating parameters, materials of construction, design codes, and utility requirements. Vendor quotes or budgetary pricing for key equipment should be obtained during FEED to support the cost estimate.
- **General Arrangement and Plot Plan:** Drawings showing the proposed layout of the facility, including equipment footprints, elevations, and routing of major piping runs and transmission lines. The plot plan should illustrate the optimized arrangement of the wind farm, utility systems, storage areas for LOHC, flare system, control room, substation, and any other ancillary facilities. FEED Contractor will be responsible for developing FEED level 3D model (typically 30% stage) for layout, safety spacing, access, maintenance space such as exchanger bundle pulling, modularization and clash review, etc.
- **Instrumentation and Control Philosophy:** A narrative or document describing the overall control strategy for the facility, including how the units will be monitored and controlled. Identification of the automation system platform (DCS/PLC) and any advanced control or safety instrumented systems (SIS) intended. Inclusion of an alarm and safeguarding philosophy, and basic cause & effect matrices for critical shutdowns along with preliminary description.
- **Electrical and Utilities Design:** Key one-line diagrams for power generation and distribution showing how major electrical loads (compressors, pumps, etc.) will be fed.

Coordination with FEED contractors and OEM suppliers to receive estimates for loads and include load lists for electrical power and utility consumption (water, steam, fuel gas, etc.). If the project requires a power supply arrangement or backup generators, include conceptual designs for those.

- **Utility and Chemicals Summaries:** Estimates for total site requirements of utilities and chemicals during start-up, shutdown and normal operations.
- **Emission and Effluent Summary:** Estimates for total continuous and intermittent plant emissions, liquid and solid effluents for entire site.
- **Relief Load Summary:** Estimates for total relief load from each site including preliminary datasheets of relief valves. The summary should describe various relief scenarios considered for the design.
- **Safety Studies and HSE Plan:** Documentation of the HAZOP study findings and recommendations conducted during FEED. A preliminary hazard analysis and risk assessment report covering major accident scenarios (e.g. hydrogen leaks, fires, etc.) and how the design mitigates them. Additionally, an outline of the environmental management plan, noting any emissions or effluents expected and design provisions to minimize environmental impact. Ensure compliance with all relevant safety standards (such as process safety requirements, hazardous area classification for electrical design, etc.).
- **Project Execution Plan (FEED Phase and Beyond):** A document detailing how the project can be executed in the next phases, building on the FEED results. This includes a proposed contracting strategy (if the FEED contractor were to carry on, or the strategy if it goes to market), module construction plan overview, module construction sequencing, and commissioning/startup plan at a high level. While much of execution planning will be refined post-FEED, the PMT in coordination with FEED contractor should highlight any important execution considerations discovered during FEED (for example, any unique construction requirements for the chosen technologies).
- **Project Schedule:** An updated level 3 project schedule covering the FEED work and a proposed timeline for detailed engineering, procurement, module construction, and commissioning. This schedule should validate that the project can be delivered within the timeframe expected by North Atlantic. Key milestones (like long-lead equipment orders, permitting, etc.) should be identified.
- **Cost Estimate:** (See Section 5 for details) A detailed cost estimate for the capital project, developed to a Class 3 accuracy or better. This should include a breakdown of costs by

discipline or by area, including direct costs (equipment, bulk materials, construction labor) and indirect costs (engineering, procurement, construction management, contingencies). The estimate must be accompanied by an explanatory basis of estimate document listing the assumptions, exclusions, sources of cost data (vendor quotes, factors, benchmarks), applied contingency and its rationale, and an estimate of accuracy range.

- **Interface Register:** Battery Limit interface tables covering all the technical interface boundaries between ISBL and OSBL areas.
- **Others:** Any additional documents and /or deliverables that are necessary to support cost estimate and for a complete FEED package, such as:
    - Line lists, valve lists, instrument indexes.
    - Preliminary piping layouts or isometrics for critical lines (if any high-risk or long-lead piping items).
    - Material selection diagrams or corrosion study results for handling hydrogen and LOHC chemicals.
    - A 3D model review summary or screenshots, to demonstrate design completeness and allow North Atlantic to visualize the facility.
    - Commissioning and Decommissioning considerations for the Wind Farm, HGP and LOHC facilities (like how initial fill and regeneration cycles will be handled).

All deliverables will be provided in both native format (e.g., CAD drawings, Excel datasheets or software used) and compiled format (PDF files for documents and drawings). The FEED contractors and PMT will ensure that the deliverables are sufficiently detailed and meet industry standards so that the next phase engineering teams (whether the same contractor or others) can seamlessly take the design forward.

At the end of FEED phase, contractor shall handover all the FEED deliverables data including tag register, equipment list, line list, instrument index, I/O list in machine-readable formats.

# 5 Cost Estimation

A critical outcome of the FEED phase is a robust cost estimate, and each FEED contractor is required to develop and provide a comprehensive cost estimation as part of their deliverables (referenced in Section 4). The PMT will be responsible for combining the cost estimates from the individual FEED studies into a cohesive overall cost estimate for the entire project. The expectations for the cost estimate are as follows:

- **Accuracy and Classification:** The cost estimate should be developed to an expected accuracy of approximately -10/+15% (typically corresponding to a Class 3 estimate as defined by AACE International or similar industry classification). The estimate should reflect the level of definition achieved during FEED and be suitable for budget authorization and investment decisions.
- **Scope Coverage:** The estimate must cover the entire scope of the project as defined in the FEED studies and any interfacing facilities not covered in the FEED studies. It should also include costs for site preparation, transportation, and installation, as applicable.
- **Cost Breakdown:** Provide a structured breakdown of the total installed cost. This breakdown may be organized by:
    - **Discipline:** e.g., civil/structural, mechanical, piping, electrical, instrumentation, etc.
    - **Facility Area:** e.g., by utility systems, storage areas, electrical substation etc.
    - **Cost Categories:** e.g., equipment, bulk materials, labor, engineering, construction management, contingency, etc. The breakdown should be detailed enough to facilitate analysis and understanding of cost drivers.
- **Basis of Estimate:** Accompany the numerical estimate with a Basis of Estimate (BOE) document as follows:
    - Base currency (USD / CAD) for all costs.
    - Base date clearly stated.
    - FX assumptions for EUR-denominated costs.
    - Sensitivity analysis for FX variations.
    - Clear statements regarding duties, customs and indirect taxes.
    - Explicit listing of exclusions, owner-furnished items and assumptions.

  The BOE should clearly state all assumptions and inclusions, such as: design basis for costing (capacity, design conditions), source of pricing data (vendor quotes for major equipment, cost databases for bulk materials and labor unit rates, etc.), assumed labor productivity and working hours, any location factors or adjustments used (without naming specific countries, just general conditions), contingency philosophy, and escalation if assumed. Note any costs excluded (e.g., land acquisition, certain owner costs like licensing fees if not included, etc.) and any specific risk allowances.

- **Operational Costs Estimate:** In addition to CAPEX, provide an estimate or analysis of expected operational costs (OPEX) for the facility. This includes estimated utilities

consumption (and costs), catalyst or chemical consumption (e.g. periodic replacement of LOHC or catalyst if applicable), manpower requirements for operation, maintenance costs, etc. This information will help in evaluating the life-cycle cost effectiveness of the proposed technology.

- **Validation and Benchmarking:** The PMT will perform basic validation on the estimate, such as benchmarking key metrics (e.g., cost per ton of hydrogen, or per kW of throughput) against industry data or similar projects (if available). Identify any areas of significant cost uncertainty or potential opportunities for cost optimization that were observed during FEED.
- **Review and Iteration:** The cost estimate should undergo the PMT's internal review process (with cross-discipline input) to ensure completeness. The final estimate will be reviewed with the Owner as part of the FEED completion, and the PMT and FEED contractors must be prepared to discuss and justify the estimate details. North Atlantic may engage an independent reviewer to audit the estimates for fairness and accuracy.

# 6 FEED Execution Approach

This section describes the intended project execution strategy and how the FEED process will be managed by North Atlantic. Bidders should read this carefully, as it sets the context for how their work will feed into the larger project timeline and decision-making process.

- **FEED Timeline and Coordination:** The expected duration of the FEED phase is approximately 6 months or better from kick-off to final deliverables. During this period, North Atlantic will assign a dedicated PMT to interface with the FEED contractors. Regular coordination meetings (e.g., weekly progress calls and monthly formal reviews) will be conducted to monitor progress, clarify any questions, and ensure alignment with project objectives. Key milestones during FEED may include Kick-off Meeting, Design Basis Freeze, Mid-way Design Reviews (PFD, P&IDs, Single Line Diagrams, etc.), HAZOP completion, 3D Model Review (as applicable), Draft Deliverables Submission, and Final FEED Completion Review.
- **Interim Deliverables and Reports**: FEED contractors will be expected to submit interim deliverables or summary reports at defined milestones (for instance, a 30% design review package or a preliminary cost report mid-way through FEED). This allows the PMT to track whether the designs are evolving in a direction that meets the project requirements.

Feedback from PMT at these stages will be provided to the FEED contractors, focusing on clarifications or requested adjustments.

- **Evaluation and EPC Selection:** Upon FEED completion, once contractors have delivered their FEED package including technical designs, cost estimates, and execution plans, the PMT will then conduct a thorough evaluation of the outcome. Criteria will include technical viability, cost-effectiveness, execution risk, and alignment with the Owner's strategic goals (the same general areas outlined in Section 8 for proposal evaluation will also guide the FEED outcome evaluation). North Atlantic's intent is to select the EPC/M contractors to proceed to the next phase of the project, with a separate tender for EPC where the FEED contractor(s) may have a distinct advantage.
- **Technology and Intellectual Property:** During execution, any proprietary technology information provided by the FEED contractor(s) will remain confidential. North Atlantic will ensure that intellectual property rights are respected: the selected design will be used solely for North Atlantic's project implementation.
- **Future Collaboration:** North Atlantic encourages the OE and FEED contractors to maintain a collaborative stance with North Atlantic throughout the FEED. In case the project scope is expanded or if future similar projects arise, there may be opportunities for the contractors beyond this specific competition. Maintaining professionalism and quality throughout is in the long-term interest of all parties.

The above approach is provided to ensure transparency on how the FEED will be executed. Table 6-1 provides key FEED milestone targets and durations. Bidders should align their proposals and internal planning to this execution strategy. Any concerns or suggestions regarding the execution approach can be addressed during the RFP clarification period prior to the proposal submission deadline.

*Table 6-1: Execution Milestones*

| Milestone | Date |
|---|---|
| Feed Kick-off | April 20th, 2026 |
| 30% Package | Kick-off + 10 weeks |
| 60% Package / HAZID | Kick-off + 18 weeks |
| 90% Package | Kick-off + 26 weeks |
| Final FEED Report | Kick-off + 32 weeks |
| EPC RFP Issue | January 2027 |

# 7 Commercial Terms

This section summarizes key commercial and contractual terms that will govern the OE contract and highlights important conditions for this RFP. Bidders must carefully review these terms and ensure their Commercial Proposals are compliant or note any exceptions explicitly.

- **Contract Structure:** The contract awarded for OE services to the selected bidder will be a standalone agreement based on a bidder's standard OE contract format. It is anticipated to be a Time and Materials (T&M) contract that is expected to run through FEED and EPC tender/evaluation up to EPC award/FID, with an option (at Owner's discretion) to extend into early EPC support. Bidders should account for all costs in the unit rates provided, as no additional compensation will be provided for completing the scope aside from agreed variations.
- **Payment Terms:** Invoices for OE services will be submitted monthly and based on time sheets to be submitted and approved by Owner's representatives on the PMT. Bidders may propose an alternate payment schedule in their Commercial Proposal, which will be subject to negotiation. North Atlantic may retain a small percentage of each payment (retainage) until final completion as a performance security.
- **Confidentiality and Data Use:** All data provided by North Atlantic to bidders (including in this RFP and attachments) and all data developed by contractors during FEED must be kept confidential and used solely for the purposes of this project. The OE contract will include confidentiality provisions binding the contractor.
- **Intellectual Property Rights:** Any intellectual property (IP) or proprietary technology brought by the contractor for the purpose of the project remains the property of the contractor. However, all FEED work products (documents, models, drawings, calculations) developed under the FEED contract will become the property of North Atlantic upon payment. North Atlantic will receive an unrestricted right to use the FEED deliverables for executing the project.
- **Liabilities and Warranties:** The OE contract will define the liability of the contractor for its work. Bidders shall state their standard liability positions, and professional indemnity limits/duration. Typically, the contractor will be liable for the consequences of errors or omissions in the FEED deliverables. Bidders should carry professional indemnity insurance and provide proof of such insurance if requested. The OE contract may also include warranties that the work is performed in a professional manner and that the deliverables will meet the specified requirements.

- **Governing Law and Arbitration:** The contract and all matters arising in connection herewith, including validity and enforcement, will be governed by, interpreted and construed in accordance with the laws of the Province of Newfoundland and Labrador, without giving effect to any conflicts of laws principles that would result in the application of a different law. Disputes that cannot be resolved amicably will be settled by arbitration under a recognized international arbitration body or rules. Bidders shall accept the proposed governing law and dispute resolution mechanism.
- **Health, Safety, Security & Environment (HSSE):** Contractor must perform their work in compliance with all applicable HSSE laws and regulations. While most PMT work is office-based, if any site visits or field work is required during FEED, the contractor must adhere to North Atlantic's safety requirements. No alcohol, drugs, or other prohibited activities are allowed on site. The contract will include standard HSSE requirements, and the contractor shall have to provide an HSSE plan if performing any on-site activities.
- **Code of Conduct and Compliance:** Bidders and their personnel must conduct business in a responsible and ethical manner. North Atlantic expects compliance with anti-bribery, anti-corruption laws (e.g., not offering any inducements to North Atlantic employees or stakeholders), and adherence to international standards for business conduct. The contract will have clauses addressing these compliance requirements. Any conflict of interest must be disclosed. North Atlantic reserves the right to disqualify a bidder or terminate a contract if any compliance violations are discovered.
- **Reservation of Rights:** North Atlantic reserves the right to accept or reject any and all proposals, to negotiate contract terms with the selected bidders, and to award or not award the OE contract at its sole discretion. Issuance of this RFP and even selection of contractor for OE role does not commit North Atlantic to proceed with the project to EPC or beyond. North Atlantic may also choose to terminate the project or the FEED contract at any stage, subject to fair compensation for work done, if business circumstances warrant.
- **Clarifications and Amendments:** Bidders may seek clarification on the RFP by submitting questions in writing by the date specified (in the RFP schedule or instructions). North Atlantic will issue clarifications or amendments to all bidders to ensure a fair and transparent process. All such addenda become part of the RFP requirements and must be acknowledged in the proposal. Bidders are advised to regularly check for any updates before finalizing their submissions.

Bidders should review the attached draft contract and ensure that their proposals either accept the terms or flag specific exceptions. Extensive exceptions or unwillingness to adhere to standard terms may result in a proposal being considered less favorable. North Atlantic aims to establish a fair contract that protects both parties and ensures a successful partnership through FEED and potentially into project execution.

# 8 Evaluation Criteria

The selection of the OE contractor through this RFP will be based on a multi-criteria evaluation to determine the best overall value to North Atlantic. The proposals will be evaluated by an evaluation committee against the following criteria (not necessarily listed in order of importance, unless weightings are specified):

- **OE Personnel Technical Capability:** Evaluation of the technical capability of personal proposed to fill the specified roles on the PMT. This includes an evaluation of the amount and applicability of the experience of the proposed personnel. Bidders offering personnel with extensive FEL-3 experience in projects with scopes similar to those The Project (e.g. wind farms, electrolytic H2 production, downstream oil and gas, etc.) will be rated highly.
- **Corporate Experience and Track Record:** The bidder's experience with projects of similar nature and scale. This includes successful completion of FEED and EPC/M for related process plants (especially hydrogen-related or chemical process facilities). Expertise in wind farms, LOHC, related hydrogen technologies, and general engineering performance demonstrated in past projects, will be considered. Client references or performance on past projects (if known to North Atlantic or provided in the proposal) will also influence this criterion.
- **Commercial Offer:** The competitiveness and completeness of the Commercial Proposal. A key factor will be the unit rates price for OE services – North Atlantic will evaluate whether it is reasonable and within budget expectations. However, the lowest blended unit rates will not automatically win; price will be considered in relation to the overall value and quality offered. The proposed payment schedule, any exceptions to contract terms, and any cost-saving offers for the EPC phase (if provided) will also be taken into account.
- **Compliance and Quality of Proposal:** The degree to which the bidder's proposal adheres to the RFP instructions. A well-organized, clearly written, and complete

proposal that addresses all requirements is essential. Proposals that contain ambiguities, omissions, or deviations without explanation may be scored lower. The responsiveness during the RFP process (such as timely clarification questions and professional communication) will also reflect the bidder's commitment and competence.

- **Safety and ESG (Environmental, Social, Governance):** The emphasis the bidder places on safety in design and their track record for safety in engineering projects. Additionally, North Atlantic may consider the bidder's corporate commitment to sustainability and any innovative ideas to minimize the environmental footprint of the project (for instance, energy optimization in the process, use of waste heat, etc.). While these may not be primary selection criteria, a strong safety culture and alignment with North Atlantic's ESG values can distinguish a proposal.
- **Newfoundland and Labrador Supply Chain Development:** Given the relative immaturity of the wind, hydrogen, and chemical industries in Newfoundland and Labrador, North Atlantic wishes to position itself as a leader in developing the supply chains necessary to make these industries viable in the province for the long term. As such, North Atlantic will assign value to proposals that, in its view, further the establishment of the wind, hydrogen, and chemical industries in the province.

North Atlantic may assign weighted scores to these criteria or use a qualitative ranking process.

Indicative evaluation weightings are as below:

- OE Personnel Technical Capability – 30%
- Corporate Experience and Track Record – 20%
- Commercial Offer – 30%
- Compliance and Quality of Proposal – 10%
- HSSE & ESG Alignment – 5%
- Newfoundland and Labrador Supply Chain Development – 5%

Bidders shall complete the Compliance Matrix (Attachment 5).

Bidders might be invited to an interview or clarification meeting as part of the evaluation, where they can present their proposal and address questions. Ultimately, North Atlantic will select the proposal that is deemed most advantageous, balancing both technical excellence and cost considerations.

All bidders will be notified of the outcome of the RFP. After selection, North Atlantic may offer a debrief to unsuccessful bidders upon request, to provide feedback (in general terms) on areas for improvement. North Atlantic appreciates the effort involved in preparing these proposals and will conduct the evaluation in a fair and confidential manner.

North Atlantic is committed to providing full and fair opportunities to Canadian and, in particular, Newfoundland and Labrador companies and individuals, on a commercially competitive basis. North Atlantic also encourages the participation of members of designated groups (women; Aboriginal peoples; persons with disabilities; and members of visible minorities) and corporations or cooperatives owned by them, in the supply of goods and services.

# 9 Attachments

The following attachments are listed, and some are included with this RFP to provide additional information and templates to assist bidders in preparing their proposals. Bidders should ensure they have received all documents and should incorporate the requirements and information from these attachments into their response where applicable:

- **Attachment 1: Instructions to Bidders** – Details on proposal acceptance, clarification and submission requirements for bidders.
- **Attachment 2: Wind Farm and Transmission Line FEED RFP** – Detailed project description, design basis data, and technical requirements necessary for Third Party Contractors to prepare a proposal to execute the Engineering to FID for the Wind Farm and Transmission Line.
- **Attachment 3: Hydrogen Production and LOHC BOP/OSBL FEED RFP -** Detailed project description, design basis data, and technical requirements necessary for Third Party Contractors to prepare a proposal to execute the FEED Study for the hydrogen production plant, the combined OSBL facilities for the hydrogen production and LOHC hydrogenation facilities, and the LOHC dehydrogenation facility.
- **Attachment 4: LOHC ISBL FEED RFP -** Detailed project description, design basis data, and technical requirements necessary for Third Party Contractors to prepare a proposal to execute the FEED Study for ISBL LOHC hydrogenation and dehydrogenation facilities.
- **Attachment 5: Proposal Templates and Forms** – A list of forms for inclusion in proposal submission, which may include a pricing breakdown form, a compliance matrix for RFP terms (where bidders indicate their compliance or exceptions to each item), and any

required declarations (e.g., a no-conflict-of-interest declaration). Bidders should use these forms, where provided to structure their proposals.

- **Attachment 6: Draft FEED Contract Terms and Conditions** – A draft version of the contract terms that will be included in the signed contract with the selected FEED contractor shall include the general terms highlighted in Section 7, as well as project-specific clauses. Bidders must review these contract requirements and include any comments or requested modifications as part of their proposal (as noted in Section 3.2, Commercial Proposal).
- **Attachment 7**: **Health, Safety, Environment and Quality (HSEQ) Questionnaire** – A mandatory corporate HSEQ form is provided. If applicable, any additional attachments such as HSE requirements, design standards, etc., would be listed here.

This RFP document, along with its attachments, constitutes the complete set of requirements for the supply of OE Services for the Project's FEED phase. Bidders are expected to carefully review all sections and attachments. North Atlantic looks forward to receiving well-prepared proposals from capable bidders and proceeding with the successful execution of the FEED process.

# Attachment 1: Instructions to Bidders

## Proposal Acceptance

Bidders are required to acknowledge receipt of this RFP by a return email, no later than 2 days from receipt of the RFP and confirm that bidder will submit the proposal within specified time. Only those who submit these forms by the deadline will be considered for the bidding.

## Clarifications

Bidders may seek clarification on the RFP content by submitting formal Requests for Information (RFIs). All RFIs must be submitted electronically to the designated North Atlantic contact provided below by the deadline specified in the RFP timeline. North Atlantic will compile and circulate responses to all received questions to ensure consistency and transparency.

In addition, should the need arise, bidders may formally request a clarification meeting in person or via Microsoft Teams. Such meetings will be subject to North Atlantic's discretion and scheduling availability and will be intended to address complex technical or procedural queries that cannot be addressed through written correspondence alone.

## Submission

All proposals must be complete and include all information and documentation requested. Proposals that are missing the required components or forms may be deemed non-compliant. Bidders must mark confidential information within the submission package accordingly.

### North Atlantic Contact Information:

For any questions or clarifications, please contact:

| |
|---|
| Name: Jeff Murphy<br>Phone: +1(709) 770-9754<br>Email: jeffmurphy@northatlantic.ca |
| Cc to:<br>Name: Tushar Chitre<br>Phone: +1(709) 682-6921<br>Email: tusharchitre@northatlantic.ca<br><br>And<br><br>Name: Jenna Broders<br>Phone: +1 (709) 691-9172<br>Email: jennabroders@northatlantic.ca |

## Submission Timelines

| Sr No | Description | Dates |
|---|---|---|
| 1 | Issue of RFP Document – RFP Letter | 10 Mar 2026 |
| 2 | Receiving Acknowledgement of RFP document in full. | With in 2 days of receiving RFP |
| 4 | Release of any Supplemental Information / Addendum by North Atlantic | 13 Mar 2026 |
| 3 | Last Date for Submission of Question / Clarifications | 17 Mar 2026 |
| 4 | Clarification provided by North Atlantic for submitted Questions | 20 Mar 2026 |
| 5 | Bid submission date | On or before 27 Mar 2026 (by 5:00 PM NL time) |

*** End of ITB***

# Attachment 2: Wind Farm and Transmission Line FEED RFP

# Engineering to FID for Green Energy Hub Wind Farm

## REQUEST FOR PROPOSAL (RFP): NARC/GEH/RFP/WFTL/001-2026-09-01

| | | | | | |
|---|---|---|---|---|---|
| 09-Jan-2026 | 0 | Issued For Quote | Ashish Dixit<br>Jenna Broders | Tushar Chitre | Jeff Murphy |
| **Date** | **Rev.** | **Status** | **Prepared By** | **Checked By** | **Approved By** |

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## List of Tables

# Nomenclature

*Table 0-1: Abbreviations*

| Abbreviations | Definition |
|---|---|
| BOP | Balance of Plant |
| CAD | Computer Aided Design |
| CAPEX | Capital Expenditure |
| CSI | Construction Specifications Institute |
| CT | Current Transformer |
| EA | Environmental Assessment |
| EOI | Expression of Interest |
| EPC | Engineering, Procurement and Construction |
| EPR | Environmental Preview Report |
| FEED | Front End Engineering & Design (Engineering Work for FID) |
| FID | Financial Investment Decision |
| HGP | Hydrogen Generation Plant |
| HP | Hydrogenation Plant |
| HSE | Health, Safety and Environment |
| HV | High Voltage |
| IM | Information Management |
| KPI | Key Performance Indicators |
| kV | Kilo Volts |
| LOHC | Liquid Organic Hydrogen Carrier |
| MCH | Methylcyclohexane |
| MV | Medium Voltage |
| MW | Mega Watts |
| NARC | North Atlantic Refining Corp |
| NLH | Newfoundland and Labrador Hydro |
| NLSO | Newfoundland and Labrador System Operator |
| OEM | Original Equipment Manufacturer |
| O&M | Operations and Maintenance |
| OPEX | Operational Expenditure |
| PEM | Proton Exchange Membrane |

| Abbreviations | Definition |
|---|---|
| PEP | Project Execution Plan |
| PPSR | Procurement Package Status Report |
| PT | Potential Transformer |
| QMP | Quality Management Plan |
| QRA | Quantitative Risk Assessment |
| RFI | Request for Information |
| RFP | Request for Proposal |
| RFQ | Request for Quote |
| SCADA | Supervisory Control and Data Acquisition |
| SI | International System of Units |
| SOW | Scope of Work |
| SR | Services Required |
| WBS | Work Breakdown Structure |
| WTG | Wind Turbine Generators |

*Table 0-2: Glossary*

| Term | Definition |
|---|---|
| Agreement | Agreement between North Atlantic and the Contractor |
| Bidder | The Engineering, Procurement and Construction (EPC) company intending to submit a proposal for this RFP |
| Contractor | The Engineering, Procurement, and Construction (EPC) company selected to carry out the Stage 1 – Engineering to FID scope of work |
| Deliverables | All documents and/or drawings required to be submitted by the contractor during the performance of Stage 1 scope of work |
| Owner | North Atlantic Refining Corp. (North Atlantic) |
| Project | North Atlantic Wind to Hydrogen Project |
| Vendor | The company that designs and/or supply equipment and/or components to be used on the project |

# Attachments

*Table 0-1: List of Attachments*

| Attachment | Description |
|---|---|
| Exhibit 1 | Company overview |
| Exhibit 2 | Stage 1 Detailed Scope of Work and Deliverables |
| Exhibit 3 | Acknowledgment of Receipt Form |
| Exhibit 4 | Request for Information (RFI) Form |
| Exhibit 5 | Checklist form |
| Exhibit 6 | Bidder Submission Form |
| Exhibit 7 | HSEQ Questionnaire Form |

# 1 Introduction

North Atlantic Refining Corp. (North Atlantic) is pleased to invite qualified Engineering, Procurement, and Construction (EPC) Contractors to submit proposals for Engineering Services up to Final Investment Decision (FID) for the Wind Farm and Transmission Line scope of the North Atlantic Wind-to-Hydrogen Project. This Request for Proposal (RFP) follows the Expression of Interest (EOI) issued on 15 May 2025, and the positive responses received from proponents have informed its scope and requirements.

This RFP represents Stage 1 of a two-phase project execution strategy:

- **Stage 1** – Engineering up to FID: The scope of this RFP covers the execution of front-end and development engineering activities required to progress the project to an investment-ready definition. Stage 1 is intended to advance the Wind Farm and Transmission Line scope to approximately 60% engineering maturity, sufficient to support a confident Final Investment Decision (FID).

- **Stage 2** – Full EPC Execution post-FID: The subsequent phase (not part of this RFP) will cover the balance of engineering required to complete the design, together with full procurement, construction, installation, and commissioning of the Wind Farm and Transmission Line facilities. Stage 2 activities will commence following a successful FID and will result in a fully executed and operational project.

By engaging an EPC Contractor ("the Contractor") for Stage 1: Engineering up to FID, North Atlantic aims to ensure that all design, planning, and cost-estimating work is completed to a high level of definition, enabling a confident FID and a seamless transition into full project execution. The selected Contractor will work closely with North Atlantic and its stakeholders to develop Stage 1 to an advanced engineering level with Class-2 cost accuracy, robust execution plans, and all necessary preparations for Stage 2.

It is important to note that a successful proposal for Stage 1 of the Wind Farm/Transmission Line EPC scope does not guarantee that the selected contractor will be awarded the scope of work in

Stage 2. There will be a second RFP process post FID in which interested parties will have the opportunity to provide a new proposal for Stage 2.

## 2 Company Profile

Headquartered in St. John's Newfoundland, North Atlantic has been a leader in the energy industry for more than 30 years. Its group of companies, NARL Marketing, North Sun Energy, NARL Logistics, Canadian Maritime Agency Limited (CMAL), and Terra Velo Solutions (TVS), collectively manage a robust energy and logistics network supplying customers with gasoline, diesel, marine and jet fuel, including a chain of retail gas, convenience and quick service restaurant locations across Atlantic Canada.

Through its subsidiary, North Atlantic Energies, North Atlantic owns and operates the second largest refinery in France at Gravenchon. North Atlantic Energies is a major player in the downstream oil sector in France.

North Atlantic operates an ice-free deep-water terminal with a jetty capable of accommodating Very Large Crude Carriers and a tank farm with an installed storage capacity of 4 MM barrels.

Building on this infrastructure and its experience, North Atlantic is advancing the first phase of its Green Energy Hub with a 320 MW windfarm and hydrogen generation plant with the capacity to produce 30,000 tonnes of green hydrogen for export.

North Atlantic is a portfolio company of Silverpeak, an alternative investment firm with expertise in energy and real estate. The firm has a history of uncovering off-market, deep value opportunities, with over $24 BN gross asset value acquired across various industries, geographies, and sectors. Its Energy Practice targets opportunities where it can enhance performance and increase value through operational expertise. It participates in development, construction, and operations phases of projects across the United States and Canada. Its investments and pipeline comprise of solar, wind, battery storage, and renewable diesel opportunities.

North Atlantic is committed to providing full and fair opportunities to Canadian and, in particular, Newfoundland and Labrador companies and individuals, on a commercially competitive basis. North Atlantic also encourages the participation of members of designated groups (women;

Aboriginal peoples; persons with disabilities; and members of visible minorities) and corporations or cooperatives owned by them, in the supply of goods and services.

Please see Exhibit 1 for a detailed company overview.

## 3 Project Overview

The North Atlantic Wind-to-Hydrogen Project harnesses wind power to produce green hydrogen through proton exchange membrane (PEM) electrolyzers, and then chemically stores the hydrogen in a Liquid Organic Hydrogen Carrier (LOHC) for safe transport and export. The project consists of two primary elements: a large onshore wind farm with its electrical infrastructure, and an integrated hydrogen production and LOHC conversion facility at an existing industrial site.

Key features of the project are as follows:

- **Wind Farm:** Approximately 45–55 utility-scale wind turbines (Wind Turbine Generators, WTGs), each rated around 7 MW. The wind farm, located between Sunnyside (west) and Garretts Cove (east) in Newfoundland, will have a total installed capacity of roughly 320 MW. The site will include about 60 km of access roads, turbine pads, and a 34.5 kV medium-voltage collector system connecting the turbines. Turbine foundations and pads are designed for heavy lifting operations (supporting large cranes for turbine installation and maintenance).
- **Transmission System:** A new 138 kV transmission line (~25 km in length) will connect the wind farm's substation to the hydrogen production complex at North Atlantic's Terminal at the Come By Chance Industrial Site. This dedicated line enables a behind-the-meter configuration where the wind farm primarily feeds the hydrogen facility. The wind farm's collector network will tie into one or more 34.5 kV / 138 kV substations, which in turn connect to the 138 kV line. The design will also allow for a grid interconnection at the Sunnyside substation to import supplemental power or export excess as needed, improving reliability for continuous hydrogen production.
- **Hydrogen Production & LOHC Facility:** At the Come By Chance Industrial Site, a Hydrogen Generation Plant (HGP) will be developed, consisting of modular PEM electrolyzer units totaling about 240 MW of electrolysis capacity. The electrolyzers will convert water into hydrogen using wind power. Downstream of the electrolyzers, a LOHC Hydrogenation Plant (HP) will absorb hydrogen into a carrier liquid. The chosen LOHC system uses a Toluene–Methylcyclohexane (MCH) pair: hydrogen is chemically bound to

toluene to form MCH for stable storage and transport. This facility will leverage existing infrastructure at the Terminal (such as storage tanks, pipelines, and marine jetty) repurposed for LOHC handling and export.

- **Product Export and Off-Take:** The hydrogen-rich LOHC will be periodically shipped from North Atlantic's Terminal to a receiving facility in Europe. There, the hydrogen will be released from the MCH and injected into the European hydrogen pipeline network, delivering green hydrogen to offtakers. The reformed toluene will be shipped back to the Come By Chance Industrial Site for reuse, establishing a circular supply chain.

Figure 3- 1 provides an overview of the project, from the wind farm through to the HGP and HP, located in Newfoundland. All engineering work in this RFP will pertain to the wind farm and transmission infrastructure, (i.e., the Balance of Plant (BOP)) up to the interface point with the HGP/HP.


*Figure 3-1: North Atlantic's Wind to Hydrogen Project layout in Come By Chance, NL*

# 4 Battery Limits

The battery limits define the exact boundaries of this scope in terms of facilities included vs. excluded. All project components necessary to generate power from the wind turbines and deliver that power up to the agreed interconnection point are considered inside the battery limits for this phase. Conversely, equipment and systems solely associated with hydrogen production and downstream processes are outside the scope (except where interface points occur).

It is important to note that this RFP is issued on the basis of a nominal hydrogen production capacity of 30K TPA. However, depending on the technical merit of the bidder's response and subject to strategic requirements and approvals from North Atlantic's Management, the Owner may consider extending the scope to include engineering for an expanded capacity of up to 60k TPA.

The battery limits for the Wind Farm and Transmission Engineering scope are as follows:

- **Wind Turbines and Balance of Plant:** All wind turbine generators (WTGs), inclusive of their towers, blades, nacelles, and internal electronics, along with the requisite mechanical and electrical BOP systems at each turbine (pad-mounted transformers, switchgear, cabling to collector, etc.). Note that procurement of the turbines themselves is not part of this phase, but their integration and requirements are included in engineering.
- **Civil Infrastructure for Wind Farm:** All on-site civil design works, such as access roads connecting turbine sites, crane pads and assembly areas, turbine foundation structures, and any required site grading or drainage. This also includes the design of the Operation and Maintenance (O&M) building and related facilities at site (since they are integral to the wind farm operations).
- **34.5 kV Collector Network**: The complete medium-voltage collection system gathering power from each turbine to the substation(s). This encompasses overhead and/or underground collector lines, including poles, towers, or trenching, cable terminations, junction boxes, and the network's protection and control systems (relays, reclosers, etc.) up to the substation fence.
- **Wind Farm Substations (34.5 kV to 138 kV):** The step-up substations located within the wind farm site that elevate the voltage to 138 kV for transmission. All substation equipment (transformers, medium voltage (MV) and high voltage (HV) switchgear, bus work, control/protection systems, Supervisory Control and Data Acquisition (SCADA) interface)

and the substation civil works (foundations, oil containment, control building, fencing, etc.) are included.

- **138 kV Transmission Line:** The new transmission line connecting the wind farm substation(s) to the hydrogen plant's substation (and the grid interconnection point). Every component of this line – conductors, towers/poles, insulators, grounding, line protection systems (e.g., line differential or distance protection relays), and associated hardware – is included in the engineering scope. The line terminates at the point of interconnection defined by North Atlantic and NL Hydro (NLH).
- **Interconnection Point Equipment:** All interface equipment required to connect the 138 kV line into the receiving substation at the hydrogen plant or grid. This can include termination structures, line disconnects, metering CTs/PTs, surge arresters, communications for protection (teleprotection signaling), and any transfer trip or special protection schemes. Essentially, everything up to the line's first breaker at the receiving end is included. For clarity, if the HGP substation is being designed by others, the exact demarcation (e.g., line landing spans and termination gantry) will be part of interface management.
- **SCADA and Communications for Wind Farm:** All SCADA, fiber-optic cables, network switches, and communication systems dedicated to monitoring and controlling the wind farm and transmission line, up to the interface with external systems. This includes communications between turbines, substations, and the central SCADA server, and the link from the wind farm control to NLH/ NL System Operator (NLSO) (for telemetry).

Excluded from Battery Limits (Out-of-Scope for this phase):

- **HGP and 480 V Systems:** All equipment and systems dedicated to the HGP (PEM electrolyzers and balance of plant) are excluded. For example, the 480 V unit substation and electrical distribution within the HGP, the control system, and any mechanical systems for hydrogen processing are outside this scope. (Interfaces such as the point where the 138 kV line feeds the HGP main transformer will be coordinated, but the HGP internal distribution is by others.)
- **HGP Electrical Gear:** Switchgear, transformers, and other electrical infrastructure on the HGP side of the interconnection are not included. This includes the HGP's main 34.5kV/480 V transformers, 480 V switchgear feeding electrolyzers, and any backup power systems for the plant.

- **HP and Storage Systems:** All systems specifically for HP, storage, and export (reactors, chemical storage tanks, pumps, etc.) are outside the wind farm & transmission scope, except for ensuring the electrical/feed interfaces and possibly sharing certain facilities like control rooms if applicable.
- **HGP/HP Control and Safety Systems**: Control system logic, instrumentation, and safety systems that are solely for the HGP and HP. (The wind farm SCADA will exchange signals with the plant's control system at defined interface points, but development of the plant's control system is by others.)

Figure 4-1 provides a visual depiction of these battery limits. The Contractor must ensure that designs at the boundaries are fully coordinated with the adjacent scopes by others, as outlined in Interface Management.

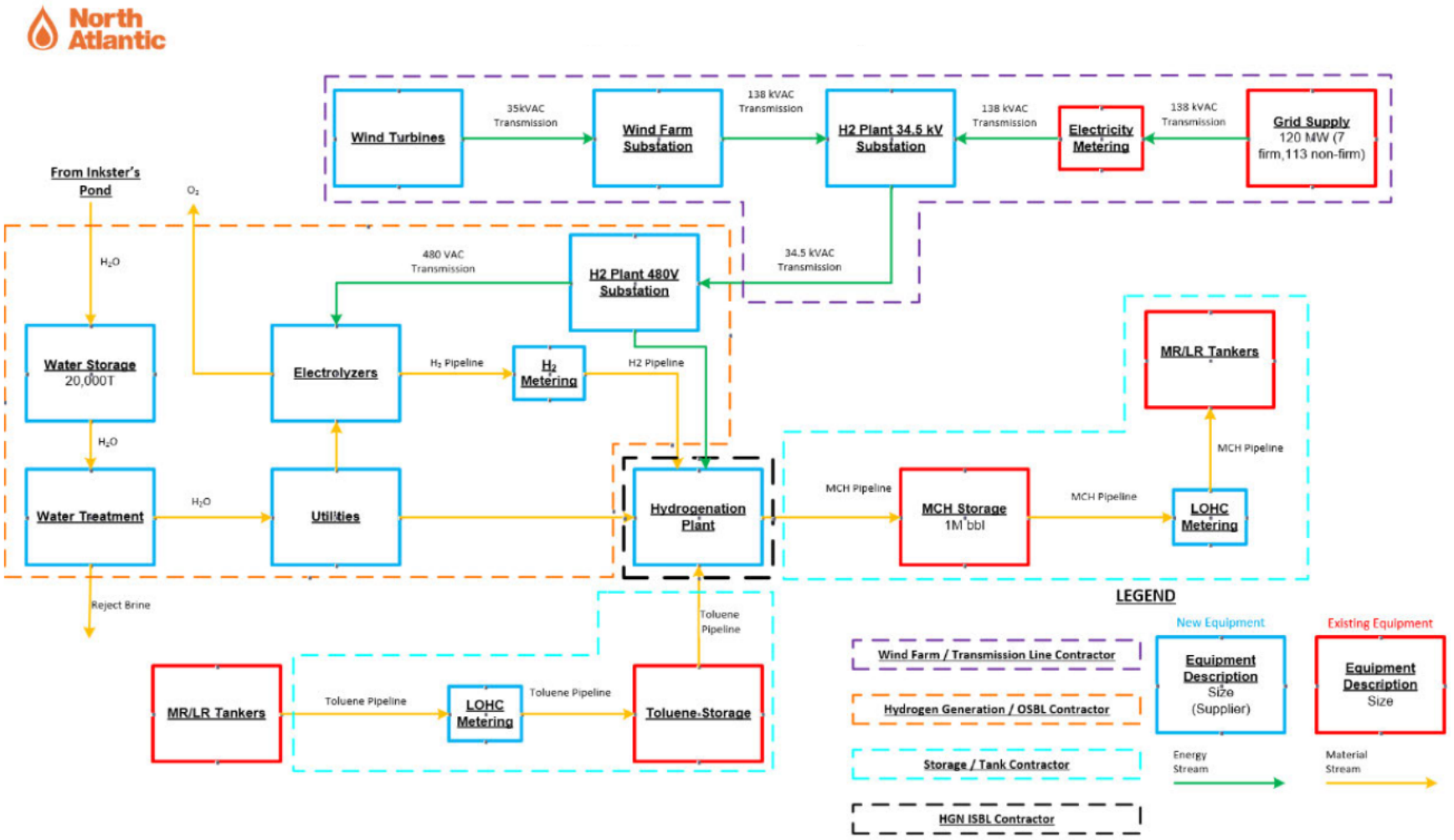


*Figure 4-1: North Atlantic Wind to Hydrogen Project - Come By Chance Facilities*

# 5 Stage 1 Objectives

The primary objective of the Stage 1 RFP is to advance the wind farm and its associated electrical infrastructure from the current pre-Front End Engineering Design (FEED) stage to a fully defined, investment-ready project state suitable for FID. By the conclusion of this phase, North Atlantic expects to have a comprehensive engineering and execution package that enables confident FID approval from the selected Contractor. Key objectives include:

- **Integrated Design Development**: Achieve a complete engineering definition for all aspects of the Wind Farm BOP – including civil works, turbine foundations, roads, electrical collection systems, substations, transmission line, and any operational facilities – at a level of detail consistent with a Class-2 estimate and FEED quality. All designs should be constructible, safe, and aligned with the project's performance requirements.
- **Execution Planning**: Produce a detailed Project Execution Plan (PEP) and associated management plans that outline how the project will be implemented. This includes strategies for procurement, contracting, construction, logistics, quality management, risk management, and interface coordination. The goal is to have a clear roadmap from engineering through construction, so that upon FID the project can move immediately into procurement and construction with minimal rework or delay.
- **Cost and Schedule Certainty**: Develop a robust cost estimate (Class-2 accuracy +15% to -10%) as defined by AACE International or similar industry classification and an integrated project schedule for the wind farm and transmission scope. These will form the basis of the project's capital expenditure (CAPEX) and timeline commitments at FID. The objective is a "no-surprise" CAPEX and schedule – i.e., to reduce uncertainty by thorough engineering, value engineering, and risk analysis, such that adequate contingencies are identified, and the estimate/schedule can be relied upon for decision making and financing. The Level 4 schedule shall be developed at a discipline- and area-based activity level and shall be sufficiently detailed to support time-phased cost loading, critical path identification and analysis, quantitative schedule risk assessment, and effective interface management across engineering, procurement, and construction scopes.
- **Alignment with Related Scopes**: Ensure technical and execution align with parallel project elements not covered in this scope (notably, the HGP and HP, which are undergoing their own FEED processes). The engineering work must incorporate requirements from the HGP's design (e.g. power interface, control signals) and the overall regulatory/environmental commitments of the larger project. Close coordination with the

HGP/HP teams will ensure that the wind farm and transmission design is compatible with the hydrogen production needs and any grid interconnection standards (via NLH/ NLSO). Ultimately, Contractor is to deliver a coordinated, constructible, and risk-mitigated engineering package, including all drawings, specifications, reports, schedules, and plans, that will enable North Atlantic's management and stakeholders to approve the project at FID with confidence. The package should also facilitate a rapid transition into full EPC execution post-FID, serving as the base for procurement and construction contracts.

## 5.1 Services Required

The Services Required (SR) under this RFP encompasses all engineering and design activities, project planning, and related services. In general, the Contractor shall perform multi-disciplinary FEED equivalent tasks, in alignment with North Atlantic's overall project development schedule and in coordination with other project stakeholders. Required services include, but are not limited to:

- **Engineering and Design**: Complete civil, structural, electrical, and mechanical engineering for the wind farm and its grid connection up to the interconnection point. This entails detailed design development sufficient for Class-2 cost estimation and investment decisions. (Construction activities are not part of this phase and will be outlined in Stage 2, but constructability must be considered throughout.)
- **Project Management and Coordination**: Overall project management services to plan, monitor, and control the engineering phase. This includes multidisciplinary coordination, progress reporting, schedule management, and cost control for the scope.
- **Procurement Planning (Pre-EPC)**: Identification of long-lead items and critical equipment (e.g., wind turbines, transformers, cables, etc.), preliminary vendor engagements, and the development of procurement and contracting strategies ready to be executed if the project moves forward after FID.
- **Interface Management**: Management of technical interfaces between the wind farm scope and other project parts (HGP/HP, grid operator, turbine supplier, regulatory bodies, etc.), ensuring all requirements at the boundaries are clearly defined and agreed.
- **Construction & Execution Planning Support**: Preliminary construction planning including constructability reviews, site logistics strategies (crane movement, component transportation, site facilities), and preparation for operational readiness and

commissioning concepts, to ensure the design is installation-ready and the transition to construction is smooth post-FID.

- **Project Controls and Risk Analysis**: Establishing project controls for scheduling and cost during the engineering phase and performing risk management (including qualitative and quantitative risk analyses) to inform contingencies and mitigation plans.

## 5.2 Stage 1 Deliverables

By the end of Stage 1, the Contractor is expected to produce a complete set of deliverables that will form the basis of the FID package and future EPC execution. The proposal should confirm the proponent's commitment to delivering, at a minimum, the following key deliverables (with the understanding that intermediate work products and draft submittals will be reviewed throughout the phase). Please see Exhibit 2 for a more in-depth review of Stage 1 Scope of Work (SOW) and deliverables:

- **Project Execution Plan (PEP):** A comprehensive PEP document covering project organization, execution strategies for engineering/procurement/construction, interface management, schedule integration, quality plan summary, HSE plan summary, risk management processes, and transition planning for EPC. This document will serve as the governing plan for how the project is managed up to FID and outline how Stage 2 will proceed. PEP also includes:
  - **Risk Management Deliverables**: Documents and logs related to project risk management:
    - A Project Risk Register (live document to be maintained, but a snapshot to be delivered at end of phase) capturing all identified risks (technical, schedule, cost, HSE, etc.), their assessment (likelihood, impact), owners, and mitigation measures.
    - A Quantitative Risk Analysis (QRA) Report covering integrated cost-schedule risk modeling. This report should summarize the Monte Carlo simulation results, showing probability distributions of final cost and schedule outcomes, recommended contingency levels and key risk drivers.
    - Minutes or summaries of any risk workshops conducted.
  - **Procurement and Contracting Plan:** A document (or section in PEP) detailing the plan for procurement of major packages post-FID. This includes the Procurement Strategy (package breakdown, sourcing strategy, list of potential

bidders for each package), a Procurement Schedule aligned with the project schedule, and a Procurement Package Register listing each major package with its scope, estimated value, key dates (Request for Quote (RFQ) issue, award, delivery), and any long-lead considerations. While actual procurement is later, this plan ensures readiness to launch EPC procurement immediately after FID.

- **Quality Management Plan (QMP)**: A project-specific QMP consistent with ISO 9001 standards, to be implemented during the engineering phase and carried into EPC. This plan will outline quality objectives, organization (quality roles/responsibilities), inspection and test plans (ITPs) strategy for design deliverables and vendor equipment (factory tests, site acceptance tests in future), documentation control, and how contractor will manage non-conformances. The QMP deliverable ensures North Atlantic that the Contractor has a robust Quality Assurance /Quality Control (QA/QC) system in place. (If not provided separately, the PEP can contain a quality section fulfilling this requirement.)
- **HSE Management Plan:** An HSE Plan for the engineering phase (and setting the stage for construction HSE). It should describe how the Contractor will meet North Atlantic's HSE requirements, including safety in design procedures (HAZID/HAZOP workshops schedule, design review for safety), and preparation for construction safety (e.g., outline of site-specific safety plan for when construction starts). It should also address environmental management measures relevant to design (e.g., designing to minimize environmental impact, considering wildlife buffers, etc.). If applicable, the HSE Plan will detail any health & safety personnel assignments and their roles during this phase.
- **Interface Management Plan:** A plan or procedure detailing how interfaces will be managed. This includes a listing of all critical interface points (technical and organizational), an interface matrix or register, and the process for interface issue resolution. The deliverable assures that no aspect of the project that overlaps with another contractor or stakeholder will be overlooked.

- **Engineering Design Packages:** Complete design documentation for all aspects of the wind farm and transmission scope. This will be subdivided by discipline and system, for example: .
  - **Civil/Structural Package:** including site layouts, road and crane pad drawings, turbine foundation designs and calculations, O&M building drawings and specs, drainage plans, and civil specifications.

- **Electrical Package:** including one-line diagrams, schematics, and layouts for the collector system and substations, equipment datasheets, cable schedules, grounding and lighting protection designs, substation physical layouts and section drawings, protection and control schematics, and SCADA/communications network architecture diagrams.
- **Transmission Line Package:** including plan and profile drawings for the line route, structure design drawings (with detailed tower/pole specifications), conductor and insulator specifications, stringing charts, and line protection/control details.
- **Interface and Integration Documents:** defining points of connection and responsibilities (e.g., documents that define the wind farm-to-hydrogen plant electrical interface, turbine supply interface specs, and utility interconnection requirements).
- Each design package should include not only drawings but also supporting documents such as design criteria & basis of design, engineering calculations or study reports (e.g., electrical studies for load flow, short circuit, grounding analysis; structural analysis reports for towers and foundations; etc.), and material take-offs or bill of quantities for estimating.

- **Value Engineering Report:** A report summarizing the value engineering activities undertaken, listing the ideas considered and the decisions made to optimize cost, performance, and constructability. This should include outcomes of any value engineering workshops, and documentation of changes incorporated into the design for improvement. It will serve to demonstrate due diligence in exploring cost-saving or value-adding opportunities.
- **Survey and Study Reports**: As described in the scope, final reports for the various site studies:
  - Updated Site Feasibility and Survey Report.
  - Transmission Line Survey Report (route survey details, land data).
  - Transportation Logistics Study report (detailing transport routes and requirements for large components).
  - Any additional geotechnical factual reports or hydro-geological reports produced in this phase.
- **Project Schedule (Level 4):** A detailed Project Schedule for the execution of the wind farm and transmission project. This should be developed initially as a high-level milestone

schedule (Level 1/2) for FID planning and then expanded into a Level 4 engineering and construction schedule. The schedule must include all engineering activities, procurement timelines for key equipment, expected construction sequences, and commissioning/start-up activities, integrated logically. The final deliverable is typically a Primavera P6 (or similar) schedule file and an accompanying schedule narrative. It should highlight critical path elements and include considerations for weather downtime, permitting, and other factors. The schedule will be used to validate the timeline at FID and will be the baseline for EPC phase scheduling.

- **Cost Estimate (Class-2) and Basis of Estimate**: A full Class 2 (+15% to -10%) Cost Estimate for the wind farm & transmission scope, along with a Basis of Estimate document. The estimate should be provided in a structured format (e.g., by WBS or by CSI code of accounts) and include detailed quantity take-offs and unit costs. The Basis of Estimate should explain all assumptions, source of cost data (vendor quotes, historical data, factoring, etc.), allowances made, exclusions, and the calculated contingency. It should also include an expected accuracy range and any risks that could impact cost. This deliverable is critical for FID and for budget authorization.
- **Monthly Progress Reports:** During the execution of the contract (Engineering up to FID phase), the Contractor will submit regular progress reports (e.g., monthly). As a deliverable set, these reports should include updates on schedule (progress against plan), cost expended (against budget for this phase), key achievements, any technical issues encountered, risk register updates, and QA/QC and HSE statistics (like any incidents or near-misses in design activities). For the purpose of proposal, it suffices to acknowledge that such reports will be provided; a template or example can be included if desired.

All deliverables should be provided in both native format (e.g., MS Word/Excel, Primavera P6, AutoCAD/Revit, etc. as applicable) and in a fixed format (PDF for documents, PDF/DWG for drawings). Drafts of major deliverables will be reviewed by North Atlantic throughout the project, and final versions shall incorporate North Atlantic's comments. The list above is not exhaustive – additional deliverables may be identified as needed to meet the project objectives – but it covers the principal outputs expected. Bidders are encouraged to propose a deliverables list that meets or exceeds these requirements, demonstrating a clear understanding of what is needed for a successful FID package.

## 5.3 Technical Requirements

All engineering work and deliverables must adhere to the technical requirements, standards, and criteria set forth by North Atlantic and applicable regulatory bodies. This section highlights key technical requirements and expectations:

- **Codes and Standards Compliance**: The selected Contractor is responsible for ensuring that all designs conform to applicable codes, standards, and regulations. At a minimum, the following shall be complied with:
  - Canadian Codes: All civil and structural designs shall comply with Canadian building codes and standards (e.g., NBCC for structural, CSA standards for steel design, concrete design, etc.). Electrical works shall comply with the Canadian Electrical Code (CEC) and CSA standards (such as CSA C22.3 for overhead power lines, CSA C22.1 for electrical installations).
  - Industry Standards: Relevant international standards such as IEC and IEEE should be applied for equipment and systems design. For example, wind turbine design and certification should follow IEC 61400 series, high-voltage equipment should meet IEC/IEEE standards, and safety systems should consider NFPA standards (like NFPA 70/70E for electrical safety, NFPA 850 for fire protection in power plants).
  - Utility / Grid Codes: Designs that interface with the grid (substations, protection schemes, generator characteristics of the wind farm) must meet NLH/NLSO interconnection requirements and grid code. Documents such as NLH's technical standards (e.g., TP-S-005 or any grid interconnection handbook) will be provided and are mandatory. Protective relaying and control schemes should be coordinated with NLH standards for reliability.
  - Quality and Workmanship Standards: Construction and fabrication standards (e.g., CSA W59 for welding, IEEE 980 for grounding, and IEC 61850 for substation communication) must be defined in the design basis. The Contractor will prepare a Design Basis and Standards document at the project outset, listing all applicable codes and standards for each discipline, which will be subject to North Atlantic's approval.
- **Design Criteria and Calculations**: The Contractor shall establish a clear Design Criteria for each aspect of the work. These criteria define the assumptions and parameters and design margins used in design (for instance, wind turbine foundation design criteria will

include extreme wind speeds, soil bearing capacities, frost depth; electrical system criteria will include voltage regulation limits, fault levels, etc.). All engineering calculations must be performed by qualified professionals and be available for North Atlantic's review. Designs must account for site-specific conditions: wind and weather data for the wind farm (e.g., icing, gusts), seismic zone for structures, environmental loading on transmission lines, etc. The proposal should acknowledge adherence to these criteria and the inclusion of safety factors in line with code requirements.

- **System Performance Requirements**: The systems engineered must achieve certain performance targets:
    - The wind farm's electrical system should be capable of delivering the full required MW to the electrolyzers (plus any losses) under typical conditions, with power quality within acceptable limits (Total Harmonic Distortion, voltage flicker, etc., should be analyzed and kept under limits specified by the utility).
    - The design should ensure high reliability and availability. Redundancies or contingencies (like N-1 criteria for critical substation components or alternate routing in the collector system if feasible) should be incorporated to avoid single points of failure that could jeopardize hydrogen production continuity.
    - The SCADA system must enable real-time monitoring and control of all key parameters, with appropriate fail-safes and cybersecurity measures. Data latency and accuracy should meet industry best practices for power plant control.
    - Equipment ratings (transformers, breakers, cables) should include a margin over the initial operating conditions to allow some future flexibility or capacity increase if possible (for example, designing collector cables not exactly at 100% of turbine output to allow minor upgrades or improved power factor control).
- **Environmental and Regulatory Requirements in Design**: Engineering must integrate all Environmental Assessment commitments and permit requirements. For example:
    - Noise and shadow flicker limits for wind turbines near any residences must be respected – the layout and turbine models selected must meet the thresholds documented in the EA.
    - The transmission line design should include mitigations for bird strikes (marker balls or bird diverters in migratory bird areas) if required by environmental regulators.

- Any protected areas or sensitive habitats identified in the EA should be avoided or have specific design accommodations (such as spanning a wider distance to avoid a wetland).
- The Contractor should plan for an Environmental Management approach during design – meaning features like spill containment for oil-filled equipment, fish-friendly design of culverts on access roads, erosion, dust and sediment control during eventual construction (to be included in drawings), etc.

- **Integration with Owner's Systems:** The designs should align with North Atlantic's existing engineering standards and specifications. North Atlantic may have standard specifications for equipment (e.g., a preferred vendor list or standard specs for transformers, switchgear, control systems). The Contractor will be expected to incorporate such standards or seek approval for deviations. Additionally, anything that will be handed over to North Atlantic operations (like the O&M building facilities or SCADA) should meet North Atlantic's operability and maintainability criteria (for instance, using SCADA software compatible with North Atlantic's fleet monitoring systems, or specifying common spare parts with other North Atlantic assets when practical).
- **Digital Deliverables and BIM:** North Atlantic encourages the use of modern engineering tools. While not mandatory, it is desired that the Contractor utilize Building Information Modeling (BIM) or 3D modeling for the substation and O&M building design, and possibly GIS-based design for the transmission route. A Digital Model of the wind farm (terrain, turbine positions, cable routing) can greatly assist in visualization and future asset management. If used, the Contractor should plan to deliver the digital models along with traditional drawings. The RFP response should indicate what design software and tools will be used (e.g., PLS-CADD for transmission line, WindPro or similar for wind farm optimization, ETAP or PSCAD for electrical studies, CAD tools for civil, etc.).
- **Testing and Commissioning Philosophy**: Although actual commissioning happens later, the design should facilitate thorough testing and commissioning. For example, include provisions for testing (such as adding test switches in protection panels, designing substations with bypass or isolation points to allow equipment testing), and prepare draft Commissioning Procedures for major systems (to be finalized in EPC phase). This ensures the project, as designed, can be smoothly started up. The Contractor's deliverables should include outline commissioning plans for turbines (in collaboration with OEM), substations (in collaboration with NLH requirements), and integration testing of SCADA.

In summary, the Contractor must deliver an engineering product that is fully compliant with all required standards and is tailored to North Atlantic's project needs. The Technical Requirements shall be rigorously followed and documented. Bidders should demonstrate knowledge of these codes and standards in their proposal and confirm that their engineering team has the necessary experience with Canadian and international standards relevant to this project. A failure to meet technical requirements in the delivered work will be grounds for non-acceptance of deliverables, so quality control in design is of utmost importance (see QA/QC section for required quality processes).

# 6 Proposal

## 6.1 Instructions

### 6.1.1 Proposal Acceptance

Bidders are required to acknowledge receipt of this RFP by returning Exhibit 3 - Acknowledgement of Receipt Form no later than January 16, 2026. Only those who submit these forms by the deadline will receive access to the confidential SharePoint document library for this RFP. The SharePoint library contains reference documents and data necessary for proposal preparation; its contents are confidential and for use only in developing a response to this RFP. See Section 6.3 for more details on Sharepoint contents.

### 6.1.2 Clarifications

Bidders may seek clarification on the RFP content by submitting formal Requests for Information (RFIs) using the template provided in Exhibit 4. All RFIs must be submitted electronically to the designated North Atlantic contact in Section 6.6 by the deadline specified in the RFP timeline in Section 6.2. North Atlantic will compile and circulate responses to all received questions in a consolidated Q&A document to ensure consistency and transparency.

In addition, should the need arise, bidders may formally request a one-time virtual clarification meeting via Microsoft Teams. Such meetings will be subject to North Atlantic's discretion and scheduling availability and will be intended to address complex technical or procedural queries that cannot be addressed through written correspondence alone.

### 6.1.3 Submission

All proposals must be complete and include all information and documentation requested. Bidders shall ensure their submissions contain all items listed in the Exhibit 5 - Checklist form.

Submissions should include a completed Exhibit 5, Exhibit 6 – Bidder Submission Form and Exhibit 7 – HSEQ Questionnaire Form. Proposals that are missing required components or forms may be deemed non-compliant.

Bidders must marked confidential information within the submission package accordingly. Given the anticipated size of the bids, the bid packages must be submitted via the SharePoint in the folder labelled "Final Submission". The file-size limit is 1GB. Each bidder should take all necessary and appropriate steps, including shrinking the size of PDF documents, to ensure that the SharePoint link file size limit is not exceeded.

Bidders shall notify the contacts outlined in Section 6.6 once their proposal has been uploaded to the SharePoint.

## 6.2 Submission Timelines

Timeline for submission is outlined in Table 6-1.

*Table 6-1: Proposal Submission Timeline.*

| Sr No | Description | Dates |
|---|---|---|
| 1 | Issue of RFP Document – RFP Letter | 09-Jan-2026 |
| 2 | Receiving of Exhibit 3 – Acknowledgement of RFP form | 16-Jan-2026 |
| 3 | Release of Supplemental Information | 20-Jan-2026 |
| 4 | Last Date for Submission of Question / Clarifications | 13-Feb-2026 |
| 5 | Clarification provided by North Atlantic for submitted Questions | 20-Feb-2026 |
| 6 | Last Date of Submission for RFP response | 13-Mar-2026 (by 5:00 PM NST) |

## 6.3 Assumptions

All bidders shall base their proposals on the assumptions and reference information ("Supplemental Information") provided by North Atlantic for this project. As stated, supplemental information will be provided to the bidders through a Sharepoint once North Atlantic has received Exhibit 3 – Acknowledgement of RFP form

It is assumed that the selected Contractor for Stage 1 RFP will also utilize the Supplement Information as the starting point and authoritative basis for their engineering work. Key assumptions and inputs include:

- **Owner Documentation:** North Atlantic will provide all relevant studies and reports completed to date. These include:
  - **Expression of Interest (EOI) – EPC Contractors Package:** The information package distributed during the EOI phase (project description, preliminary scope outline, etc.).
  - **Wind Farm Layout & Coordinates:** A preliminary wind farm layout with the proposed locations (coordinates) of turbine sites, including constraints applied during site selection.
  - **Pre-FEED Drawings:** Preliminary engineering documents developed during the pre-FEED phase, which shall serve as the technical baseline for this scope.
  - **Geotechnical Investigation Report:** Data from geotechnical surveys including borehole logs, soil stratigraphy, rock depth and quality, and any recommendations for foundations. This will guide foundation and civil design.
  - **Environmental Assessment (EA) Submission:** The full Environmental Assessment documentation submitted to regulators, along with any supporting studies (wildlife studies, noise assessments, heritage surveys, etc.). This also encompasses any conditions of release or mitigation requirements already identified.
  - **Environmental Preview Report (EPR) Guidelines and Submission:** Applicable environmental protection plan guidelines and regulatory standards that the project must follow (provincial and federal regulations for wind farm development, transmission lines, etc.). At this stage North Atlantic is working towards the EPR submission. Once the submission is complete, a copy will be provided to the selected contractor.
  - **Interconnection Studies:** The Interconnection Request filed with NLH/NLSO, including any load flow and stability analysis results or screening study reports. Also, any documented requirements from NLH regarding protection settings, system impact studies, and grid code compliance.
- **Use of Owner's Data:** Information provided by North Atlantic is for reference These documents collectively establish the project's baseline. If the Contractor identifies any gaps, discrepancies, or the need for additional information during their review, they are expected to promptly notify North Atlantic and seek clarification or additional data. Any deviations from or changes to the basis data must be agreed with North Atlantic.

- **Regulatory and Permitting Context:** It is assumed that major environmental and planning approvals are being handled by North Atlantic (or are already in progress). The selected Contractor's role is to ensure the engineering deliverables comply with the commitments and requirements in those approvals. For example, if the EA imposes a constraint on turbine locations or noise levels, the design must respect that. The Contractor should plan for some interaction with regulators and EA contractor for technical clarifications, but not for leading any new permitting processes (unless explicitly stated otherwise).
- **Coordination with OEM and FEED Teams:** North Atlantic will facilitate introductions and technical coordination with the turbine Original Equipment Manufacturer (OEM) and the HGP/HP FEED contractors. It is assumed that the selected Contractor will have access to the necessary technical information from these parties early in the project. All bidders should plan their work with the understanding that a collaborative interface with these parties is required.
- **Site Access and Conditions:** For proposal purposes, assume that the site is not accessible by road for surveys or investigations and can only be reached by helicopter under typical conditions. North Atlantic will support the contractor in obtaining any required access permissions. All physical works during this phase (e.g., surveys) will be non-intrusive or will have the necessary permits in place. Extreme weather conditions should be factored into schedule planning. No additional or extraordinary access challenges are expected beyond those described in the provided reports.
- **Future Work beyond FID:** The scope of this RFP does not include procurement of equipment or construction works. However, bidders should assume they will need to produce procurement packages and execution plans such that upon FID, North Atlantic can quickly proceed to tender or negotiate EPC contracts for construction. The selected Contractor will not actually carry out purchases or field work in this phase but must provide the documentation to enable those in the next phase.

If any of the above assumptions prove to be incorrect or if additional assumptions are made in the proposal, the Bidder should clearly state them in their proposal. All clarifications or exceptions related to the base data must be resolved in discussion with North Atlantic as early as possible.

## 6.4 Proposal Requirements

### 6.4.1 Technical Requirements

The Proposal shall include the following technical requirements at a minimum:

- **Work Plan:** A concise but comprehensive Work Plan outlining its strategy for executing the Engineering up to FID scope. The Work Plan must demonstrate a strong understanding of project objectives, technical scope, interfaces, and schedule requirements. It should describe the Contractor's approach to delivering all required engineering deliverables, including Class 2 cost estimates and a complete Project Execution Plan (PEP) covering engineering, procurement, constructability, logistics, commissioning readiness, and interface management.

  The plan must also highlight key deliverables, resource strategy, value engineering approach, risk management, quality assurance, and document control practices. Any proposed study or activity outside the defined Scope of Work must be clearly identified and justified. The Work Plan will be a critical evaluation element, reviewed for its technical depth, integration, and readiness to support a seamless transition to EPC.
- **Execution Schedule:** Submission of a high-level Execution Schedule that outlines the timeline and sequencing for completing the Engineering up to FID scope. This schedule should reflect a logical and realistic path to FID, clearly identifying key engineering deliverables, milestone submissions, interface coordination points, and review cycles. The schedule must align with the overall project timeline and demonstrate how critical activities will be completed to support Class 2 cost estimation and investment readiness. The Contractor is expected to incorporate dependencies across disciplines, stakeholder interfaces, and long-lead engineering items. The schedule shall include major workstreams, deadlines for key deliverables, internal and external review gates, and any owner input or approval milestones. Emphasis should be placed on how the Contractor will maintain schedule integrity, manage float, and proactively identify and mitigate risks that could impact the FID timeline.
- **Proposed Organization and Key Personnel:** Provide a detailed organizational structure that illustrates the proposed team responsible for executing the Engineering up to FID phase. The organization chart must clearly define reporting lines, functional responsibilities, and coordination mechanisms across disciplines including project management, engineering, procurement, quality, safety, interface management, and project controls.

  The organization must reflect an integrated and collaborative project approach aligned with the complexity of the scope and North Atlantic's execution strategy. Clear allocation of leadership roles, discipline leads, and interface coordination responsibilities is expected to demonstrate the Contractor's readiness and resourcing strategy.

In addition, the Contractor shall submit detailed Curriculum Vitae (CVs) for all key personnel identified in the organization chart. These CVs must highlight relevant qualifications, technical expertise, prior project experience, and alignment with their proposed responsibilities. Emphasis should be placed on experience in wind energy, transmission, and hydrogen infrastructure projects, as well as familiarity with regulatory and interconnection environments in Newfoundland and Labrador or similar jurisdictions.

Key personnel to be identified and supported with CVs include, but are not limited to:

- Project Manager
- Engineering Manager
- Civil/Structural Lead
- Electrical Lead
- Transmission Line Lead
- SCADA and Communications Lead
- Interface Manager
- Procurement Engineer
- Quality Manager
- HSE Manager
- Document Control Lead
- Project Controls/Scheduling Lead

North Atlantic reserves the right to review, interview, and request substitutions for any personnel whose qualifications are found misaligned with the project requirements.

- **Site Survey and Site visit Plan:** Develop a comprehensive Site Visit and Site Survey Plan to support all engineering activities up to FID. Given the remote and partially inaccessible nature of the site, the Contractor is expected to adopt advanced technologies to reduce the frequency and cost of physical site visits.

  The plan shall incorporate the use of drone-based surveys for topographic mapping, visual inspections, and terrain assessment to collect high-resolution geospatial data. This approach will enhance safety, reduce mobilization requirements, and accelerate data acquisition.

  The Contractor shall also detail the schedule and scope of planned site visits, coordination protocols with North Atlantic, and adherence to health, safety, and environmental guidelines. Where required, the Contractor must identify external survey partners and ensure that all collected data is integrated into the engineering models, logistics planning, and permitting documentation.

- **Project History Sheet:** Proposal shall include a set of Project History Sheets summarizing relevant past project experience. Each sheet should be no more than two pages and must include:
    - Project Title and Location
    - Client Name
    - Scope of Work Performed
    - Contract Value and Duration
    - Key Engineering Disciplines Involved
    - Technical or Execution Challenges and Solutions
    - Project Outcome and Performance Metrics

  These summaries should demonstrate the Contractor's capability and experience in delivering similar engineering scopes, especially in wind energy, transmission infrastructure, and hydrogen-related projects. Preference will be given to projects executed under similar environmental, regulatory, or logistical conditions.

### 6.4.2 Commercial Requirements

The Proposal shall include the following commercial requirements at a minimum:

- **Price Breakdown (Commercial):** Provide a detailed and transparent commercial proposal, including a comprehensive Price Breakdown for Stage 1. This breakdown must align with the defined SOW and enable clear traceability between technical deliverables, project phases, and associated costs.

  The price submission shall include:
    - Total Lump Sum Price for Engineering up to FID services (Stage 1).
    - Itemized Cost Breakdown by work packages or discipline
    - Allocation of Costs across major cost categories such as engineering hours, subcontracted services, studies, software/tools, travel, and administrative support.
    - Breakdown by Milestone or payment schedule (if applicable), tied to deliverables or project progress.
    - Assumptions and Exclusions, clearly identifying any items not covered under the proposed pricing.
    - Optional Items or Studies, if recommended outside the defined scope, shall be priced separately.

- **Schedule of Rates (Commercial):** Submit a clear and itemized Schedule of Rates covering key personnel, engineering disciplines, and any reimbursable services related to the Stage 1. This should include:
    - Hourly or daily rates by discipline and experience level
    - Unit rates for any specialist or third-party services
    - Applicable rates for site visits, surveys, or technical workshops

  These rates will support scope adjustments, change orders, and evaluation of any additional services required during the phase.
- **Term and Conditions (Commercial):** Provide a clear statement of the proposed commercial terms and conditions applicable to this RFP. This should include, but is not limited to:
    - Proposed payment terms and invoicing milestones
    - Validity period of the commercial offer
    - Assumptions and exclusions that impact pricing
    - Currency of offer and applicable taxes
    - Any commercial clarifications or conditions linked to execution timeline, scope, or deliverables

  All commercial terms should align with the structure and intent of the Engineering up to FID phase and be consistent with the proposed schedule and work plan.
- **Change Management:** Outline a clear and structured Change Management approach for the Stage 1. This process must define how technical, commercial, or scope-related changes will be identified, assessed, documented, communicated, and approved. The Contractor shall ensure traceability of all proposed changes, including evaluation of cost, schedule, and risk impacts. A Change Register shall be maintained throughout the project, and no change shall be implemented without formal approval from North Atlantic. This ensures alignment with project objectives, budget control, and transparent decision-making.
- **Invoicing and Payment (Commercial):** Provide a clear invoicing and payment plan aligned with project milestones for the Stage 1. Invoices shall be submitted on a monthly basis, supported by progress reports and deliverable tracking. Each invoice must reference the agreed milestone schedule, approved deliverables, and associated percentage of work completed. Payments will be made upon North Atlantic's review and acceptance of the invoice and corresponding documentation, in accordance with the agreed terms and conditions.

- **Other Additional Document Submission:** Bidders are encouraged to submit any additional documents, case studies, technical brochures, or supporting materials they believe will strengthen their proposal. These may include innovations, proprietary methodologies, digital tools, or lessons learned from similar projects. While optional, these supplementary materials will be considered during evaluation if they provide meaningful insight into the bidder's capabilities, value-added approaches, or risk mitigation strategies.

## 6.5 Bid Evaluation

Responses to this Stage 1 RFP for the Wind Farm and Transmission Line scope of North Atlantic Wind-to-Hydrogen project will be evaluated based on a multi-criteria assessment that considers both technical and commercial dimensions. The evaluation process will prioritize quality, capability, and value, with the following key components outline in Table 6-3.

*Table 6-2: Bid Evaluation Criteria*

| Sr No | Points | Scope | Remarks |
|---|---|---|---|
| 1 | Technical Approach | Work Plan and Execution Strategy | Clarity, completeness, and feasibility of the proposed methodology to meet project objectives and deliverables. |
| | | Project Execution Plan (PEP) | Quality and integration of planning across engineering, procurement, constructability, and commissioning readiness. |
| | | Resource Plan and Team Structure | Appropriateness of proposed organization, resource availability, and experience of key personnel. |
| | | Schedule | Realism, completeness, and alignment of the proposed timeline with project milestones. |
| | | Interface and Risk Management | Approach to managing interfaces with key stakeholders and identification/mitigation of project risks |
| | | Value Engineering | Demonstrated strategy to drive efficiency and cost/time savings |
| | | Innovative Approaches | Innovative Approaches: Use of technology, including site survey methods like drone utilization, to enhance delivery. |

| Sr No | Points | Scope | Remarks |
|---|---|---|---|
| 2 | Commercial Proposal | Price Breakdown and Schedule of Rates | Transparency, competitiveness, and consistency of pricing with scope. |
| | | Payment Terms and Conditions | Alignment with North Atlantic's financial controls and milestone-based disbursements |
| | | Commercial Compliance | Acceptance of contractual terms and conditions. |
| 3 | Experience and Track Record: | Relevant Project Experience | Submission of project sheets demonstrating successful delivery of similar scope and complexity. |
| 4 | Overall Proposal Quality: | Presentation and Coherence | Presentation and Coherence: Professionalism, organization, and completeness of the submission |

The highest-ranked bidder will be selected based on best overall value (not solely on lowest cost) ensuring the chosen EPC contractor has the technical competence, planning rigor, and commercial responsibility to successfully deliver the Engineering up to FID phase.

North Atlantic is committed to providing full and fair opportunities to Canadian and, in particular, Newfoundland and Labrador companies and individuals, on a commercially competitive basis. North Atlantic also encourages the participation of members of designated groups (women; Aboriginal peoples; persons with disabilities; and members of visible minorities) and corporations or cooperatives owned by them, in the supply of goods and services.

It is important to note that for transparency and benchmarking purposes, North Atlantic will also be obtaining a parallel quote for the same Engineering up to FID scope from its nominated consultants. This internal benchmark will serve as a reference for evaluating the competitiveness, completeness, and value of all proposals received under this RFP. North Atlantic reserves the right, at its sole discretion, to allocate all or part of the scope to the consultant if the submitted EPC Contractor proposals are determined to be non-compliant, commercially uncompetitive, or misaligned with project expectations. This clause ensures the Owner's ability to maintain schedule, cost control, and delivery quality.

## 6.6 Contact Information

Execution of a Non-Disclosure Agreement (NDA) and submission of the Acknowledgement of Receipt Form (Exhibit 3) are required to obtain access to all Exhibits and Owner-provided documents associated with this RFP.

Bidders who do not currently have an NDA in place with North Atlantic Refining Corp. must contact the Owner's designated representative to request a draft NDA. Access to the confidential SharePoint document repository and related reference materials will only be granted once the NDA has been fully executed by both parties and the Acknowledgement of Receipt Form has been submitted and accepted by the Owner in accordance with the timelines specified in Table 6-1: Proposal Submission Timeline.

For any questions or clarifications, please contact:

Name: Ashish Dixit
Phone: +1(709) 631-4225
Email: ashishdixit@northatlantic.ca

# 7 Language and Measurement

The language of the agreement is English. All proposals from bidders and project deliverables developed by the selected Contractor must be in English.

Units from the International System of Units (SI) are used throughout the project. Project specific units derived from SI are shown in Table 9-1 below and shall be used by the bidders.

*Table 7-1: Units of Measurement*

| Parameter | Unit Description | Unit Abbreviation |
|---|---|---|
| Concentration | Milligrams per litre | mg/l |
| | Grams per litre | g/l |
| | Parts per million | ppm |
| | Parts per billion | ppb |
| Currency | US Dollar | USD $ |
| | Canadian Dollar | CAD $ |
| Temperature | Degree Celsius | °C |
| Pressure (absolute) | Bar, kilopascal absolute | bara, kPaa |

| Parameter | Unit Description | Unit Abbreviation |
|---|---|---|
| Pressure (gauge) | Bar, kilopascal gauge | barg, kPag |
| Pressure Drop | Bar, millibar kilopascal | bar, mbar, kPa |
| Mass / Weight | Kilogram, metric ton | Kg, t |
| Molar flow | Kilogram mole per hour | kgmole/h |
| Gas / Liquid volume (1) | Normal cubic meter<br>Standard cubic meter<br>Actual cubic meter | $Nm^3$<br>$Sm^3$<br>$Am^3$ |
| Volume | Cubic meter | $m^3$ |
| Flow (volume) | Cubic meter per hour | $m^3/h$ |
| Flow (mass) | Kilogram per hour | kg/h |
| Liquid Flow (1) | Normal cubic meter per hour<br>Standard cubic meter per hour<br>Actual cubic meter per hour | $Nm^3/h$<br>$Sm^3/h$<br>$Am^3/h$ |
| Length | Millimeter, meter, kilometer | mm, m, km |
| Velocity | Meter per second | m/s |
| Heat | Kilojoule, metajoule | kJ, MJ |
| Power | Kilowatt, megawatt | kW, MW |
| Heat Capacity | Kilojoule per kilogram-degree kelvin | kJ/kg K |
| Heat Transfer Coefficient | Watt per square meter-kelvin | $W/m^2$ K |
| Higher Heating Value / Lower Heating Value | Kilojoule per cubic meter | $kJ/m^3$ |
| Wobbe Index | Kilojoule per cubic meter | $kJ/m^3$ |
| Viscosity | Centipoise<br>centistoke | cP<br>cSt |
| Tubing Size | millimeter | mm |
| Thermal Conductivity | Watt per meter-kelvin | W/m.K |
| Surface Tension | Dyne per centimeter | dyne/cm |

(1) Basis of normal, standard and actual volume conditions shall be reported

# Attachment 3: Hydrogen Production and LOHC BOP/OSBL FEED RFP

# FEED Services for Hydrogen Generation and LOHC – BoP and OSBL Facilities

## REQUEST FOR PROPOSAL (RFP)

For access to an unredacted copy of the RFP and/or supplementary appendices, please contact:

Tushar Chitre at tusharchitre@northatlantic.ca

Closing Date: 06-Mar-2026 @ 5:00 pm NST

| | | | | | |
|---|---|---|---|---|---|
| 2026-01-16 | 0 | Issued for Quote | J. Broders | T. Chitre | T. Chitre |
| **Date** | **Rev.** | **Status** | **Prepared By** | **Checked By** | **Approved By** |

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## Acronyms

| Acronym | Definition |
|---|---|
| BFD | Block Flow Diagram |
| BL | Battery Limits |
| BOE | Basis of Estimate |
| BoP | Balance of Plant |
| CAPEX | Capital Expenditure |
| EPC | Engineering, Procurement, Construction |
| EPCM | Engineering, Procurement, Construction Management |
| ESG | Environmental, Social, Governance |
| FEED | Front End Engineering Design |
| HAZID | Hazard Identification |
| HAZOP | Hazard and Operability Study |
| HGP | Hydrogen Generation Plant |
| HSSE | Health, Safety, Security, and Environment |
| IP | Intellectual Property |
| ISBL | Inside Battery Limits |
| kTPA | Kilo Tonnes Per Annum |
| LOHC | Liquid Organic Hydrogen Carrier |
| MCH | Methylcyclohexane |
| NARC | North Atlantic Refining Corp. |
| NL | Newfoundland and Labrador |
| OEM | Original Equipment Manufacturer |
| OPEX | Operational Expenditures |
| OSBL | Outside Battery Limits |
| PDP | Process Design Package |
| PEM | Proton Exchange Membrane |
| P&ID | Piping and Instrumentation Diagram |
| PFD | Process Flow Diagram |
| QA/QC | Quality Assurance and Quality Control |
| RFP | Request for Proposal |
| SIS | Safety Instrumentation System |

# 1 Introduction

## 1.1 Project Overview

North Atlantic Refining Corp. ("NARC" or North Atlantic) is developing an integrated wind-to-hydrogen-to-LOHC export system centred on the Come By Chance Industrial Site in Newfoundland and Labrador, with dehydrogenation facilities in Europe. The Project will produce low-carbon hydrogen using wind generation and associated grid interconnections, convert the hydrogen into methylcyclohexane (MCH) using toluene as a Liquid Organic Hydrogen Carrier (LOHC), and export MCH via existing marine terminal infrastructure to European receiving terminals for dehydrogenation and injection into regional hydrogen networks.


*Figure 1-1: North Atlantic Wind to Hydrogen Project Layout Come By Chance, NL*

The Project is split into four main areas:

- Wind Farm, Transmission Lines and 35 /138 KV Substation at wind side and 138/35 KV substation on Hydrogen side.

- Hydrogen Generation Plant (HGP) and 480 V Unit Sub-Substation
- Liquid Organic Hydrogen Carrier Plant – Hydrogenation at Come by Chance, Newfoundland and Labrador (NL) area.
- Liquid Organic Hydrogen Carrier Plant – Dehydrogenation at user location in Europe.

The wind farm consists of approximately 43–55 utility-scale turbines, each rated about 7 MW, providing an installed capacity of roughly 320 MW for annual hydrogen production of 30 kTPA. The site includes about 60 km of access roads and a 34.5 kV collector system, designed using regional wind and topographic data. Foundations are engineered to support large-capacity tower cranes for turbine assembly and maintenance.

A 138 kV transmission line, approximately 25 km in length, connects the wind farm to HGP and Hydrogenation Plant under a behind-the-meter configuration. Supplemental grid supply from the Sunnyside substation provides additional reliability for hydrogen production and hydrogenation operations.

The HGP will comprise of modular PEM (Proton Exchange Membrane) electrolyzer units, organized into multiple arrays totaling about 240 MW of electrolysis capacity for annual hydrogen production of 30 kTPA. Each array includes several electrolyzer cabinets integrated with rectifiers, transformers, and process auxiliaries.

The LOHC plants will employ a toluene–MCH carrier system using licensed commercial technology. Existing hydrocarbon storage tanks, pipelines, and jetty facilities at the North Atlantic Terminal will be repurposed for LOHC handling. The hydrogen-laden LOHC will be shipped to a dehydrogenation facility [redacted] where hydrogen will be released and injected into the European hydrogen pipeline network for final delivery to offtakes.

## 1.2 Purpose of Request for Proposal

The Owner (North Atlantic) is soliciting proposals for Front-End Engineering Design (FEED) services for the Balance of Plant (BoP) and Outside Battery Limits (OSBL) systems supporting a new LOHC based hydrogen generation and storage facility. This facility will consist of three primary process plants: a **hydrogen generation plant** that uses PEM electrolyzers to convert water into hydrogen, a **hydrogenation plant** that chemically binds hydrogen to a liquid organic carrier, and a **dehydrogenation plant** that releases hydrogen from the carrier.

The purpose of this Request for Proposals (RFP) is to engage a qualified engineering contractor to perform FEED studies for the BoP of Inside Battery Limit (ISBL) units and OSBL ("BoP-OSBL FEED") scope only, including utilities, offsites, civil works, interconnecting systems and all interface in coordination with

- Electrolyser OEM for Hydrogen Generation Plant (HGP)
- ISBL technology providers of LOHC facilities and
- Host Terminal Operators [redacted] (Dehydrogenation Plant).

Bidders are not expected to provide proprietary LOHC process technology. The ISBL scope - including reactors, core process design, catalyst systems, and conversion chemistry - will be defined separately by technology licensors. The BoP-OSBL FEED contractor shall integrate these ISBL packages into a complete, investable facility design.

Each BoP-OSBL FEED contractor is expected to deliver a complete, end-to-end FEED package with associated cost estimate and execution plan for hydrogen generation and the full LOHC chain within the defined scope.

This RFP outlines the project scope, requirements, and the terms under which the proposals are solicited and provides the information necessary for bidders to prepare and submit comprehensive proposals that address the technical and commercial requirements for the BoP-OSBL FEED services.

Following completion of the FEED, North Atlantic will evaluate the deliverables and outcomes from the contractor and intends to solicitate bids which may include Engineering, Procurement and Construction (EPC) / Engineering, Procurement and Construction Management (EPCM) services, subject to performance, negotiations, and internal approvals.

Unless otherwise agreed in writing, partial proposals [redacted] will not be generally considered. Bidders shall assume responsibility for all scope elements described herein and in the RFP attachments. However, North Atlantic keeps it's right to entertain the partial proposals for hydrogenation only or dehydrogenation only scopes if it adds value to the overall project.

All information provided in proposals shall be non-proprietary and free of any company-specific branding or references. Bidders are expected to use globally accepted standards and terminology in their submissions. Any assumptions or exceptions should be clearly stated. North Atlantic

reserves the right to award contracts to a bidder, to negotiate scope and terms, or to make no award as a result of this solicitation. By participating in this RFP, bidders acknowledge and agree to abide by the terms and conditions outlined herein.

### 1.3 Scope Boundaries and External Interfaces

The wind farm, regional transmission infrastructure, grid connection, and HGP works above ground scope of ISBL portion of Hydrogenation and Dehydrogenation units are being developed under separate contracts and are not part of this FEED scope. The FEED contractor shall treat these facilities as external interfaces and shall adopt the design basis, operating envelopes, and interface data provided in Attachment 1 and subsequent North Atlantic communications.

Similarly, [redacted] the LOHC process units will be hosted within existing terminal facilities. The FEED contractor shall treat host utilities, infrastructure, and marine facilities as external interfaces, and shall design the dehydrogenation units BoP and associated utilities and systems to integrate with those host facilities in accordance with the interface information provided by North Atlantic.

## 2 Scope of Services

The scope of work for the FEED encompasses development of all activities required to deliver comprehensive front-end engineering designs for the Balance of Plant for ISBL portions of HGP and LOHC facilities, covering hydrogen generation and both the hydrogenation and dehydrogenation process units, and all supporting OSBL systems such as utilities and offsites. The FEED shall be developed to a level suitable for investment decision support and subsequent EPC tendering and execution.

### 2.1 LOHC ISBL FEED Contractor Scope

This section is provided for reference and understanding the scope of LOHC ISBL FEED contractors and is outside of BoP-OSBL FEED scope.

For LOHC ISBL scope, an ISBL FEED for both the main process units (i.e. hydrogenation and dehydrogenation) is performed by the licensors on dual FEED basis with following scopes and thus excluded from this RFP.

**Hydrogenation Unit**

Two options for scope of Hydrogenation are as follows:

1. Initially sized for an annual hydrogenation capacity of 30 kTPA hydrogen; and is fully future-proofed and plot-protected to enable a subsequent expansion to 60 kTPA within the same overall plot and battery limits, through defined pre-investments (e.g., oversized foundations and pipe racks, space reservations, tie-in points, and oversizing of selected equipment where technically and economically justified).

   Thus, the contractor shall provide:

   - A fully defined 30 kTPA FEED case, including process design, equipment specifications, layouts, utility loads, HSSE studies and a Class 3 cost estimate; and
   - A corresponding 60 kTPA FEED / CAPEX case, clearly identifying incremental scope, equipment, construction works and costs required to expand from 30 kTPA to 60 kTPA.

2. Second option shall be for the total annual production capacity of 60 kTPA case including process design, equipment specifications, layouts, utility loads, Health, Safety, Security, and Environment (HSSE) studies and a Class 3 cost estimate

The location for both the options is Come-By-Chance, NL, Canada adjacent to existing Braya Refinery and corresponding North Atlantic Terminal.

North Atlantic will try and eliminate one of the options during the bidding phase and only one option will be selected for performing the FEED.

**Dehydrogenation Unit**

The ISBL FEED contractor shall develop two options for Dehydrogenation as follows:

- Process Design Package for 30 kTPA capacity [redacted]
- Process Design package for 60 kTPA capacity [redacted]

The ISBL contractor shall include process design basis, functional descriptions, standard design data and proprietary equipment specifications as a minimum in Process Design Package (“PDP”) for each facility. Contractor shall also provide a plan to quickly move from PDP to FEED development so that overall project schedule can be maintained. **Only one of the two options will be progressed further into FEED development.**

## 2.2 Detailed scope of BoP-OSBL FEED Contractor

The following sections outline in detail the BoP-OSBL FEED scopes required for this RFP.

### 2.2.1 Hydrogen Generation Unit

1. A step-down transformer from 34.5kV to 480V and downstream distribution of power to HGP and HGN units. Battery Limit for the contractor scope will be 34.5kV transformer feeder bay.
2. Coordinate with electrolyser OEM to design foundations for all electrolyser islands.
3. Coordinate with electrolyser OEM for unloading, transport and installation of each electrolyser island from the transport containers. An OEM procedure to be followed.
4. Coordinate with electrolyser OEM to finalize which utility system may be combined into overall utility systems – water treatment and glycol cooling system are preliminary candidates. Currently those are part of individual electrolyser islands.
5. Interconnecting piping for utilities and hydrogen product, electrical, instrumentation and communication cables and underground services for electrolyser islands in Hydrogen Generation unit.

### 2.2.2 Hydrogenation Unit

1. Transportation of ISBL modules from ISBL FEED contractor's mod yard during construction phase of the project and installation at Come By Chance project site. Location of module origin to be provided by ISBL FEED contractor.
2. All the underground scope for Hydrogenation unit including but not limited to civil works, foundation design, underground drain systems and fire water ring. Contractor will coordinate with ISBL FEED contractor for exchange of information.
3. Design and supply of all the battery limit interface in coordination with ISBL FEED contractor.
4. Coordinate with ISBL FEED contractor for any other special requirements for the unit.

### 2.2.3 Combined Scope at Come By Chance site

1. Coordinate with ISBL FEED contractor and electrolyser OEM for the following:
    a. Utilities, electrical loads, effluents and emissions, relief loads and chemicals summaries.
    b. Unit plot plan requirements and unit plot plan sizing.

c. Design of combined utilities and offsite services for Hydrogen Generation and Hydrogenation units at Come By Chance location. Basic requirement is provided in the Pre-FEED design documents as a part of this RFP.

2. Overall plot plan.
3. Relief systems including flare and vent systems.
4. All the civil works and underground systems, interconnecting piperacks and electrical systems.
5. All the other offsite services such as fire water, office complex, laboratory, workshops and warehouses required for maintenance and continuous uninterrupted operation.
6. A Study for transportation, unloading of modules at Tug Berth in Come By Chance port and transportation and storage at site. A preliminary report is available from Pre-FEED deliverables.
7. Estimate for Site development and geotechnical work.
8. Waste water treatment facility along with design of outfall for discharge to the ocean.

### 2.2.4 Major Scope exclusions at Come By Chance site

1. Wind Farm, Transmission Lines and 35 /138 KV Substation at wind side and 138/35 KV substation on Hydrogen side
2. All the storage for Toluene and MCH – The existing storage tanks at site to be repurposed for LOHC storage and ship loading operation.
3. Loading / Unloading operation – Existing Jetty at Come By Chance will be used and all modifications required will be by others.
4. Any new pipeline requirement from storage tanks to jetty are excluded from the scope. The pipelines required to / from HGN unit from / to storage areas are included as a part of BoP-OSBL FEED contractor.
5. Any modifications or strengthening required for road access from module unloading to the site.

### 2.2.5 Dehydrogenation Unit

1. For Dehydrogenation unit, some of the utilities will be provided by the terminal operator where facility is planned. BoP-OSBL FEED contractor will design all the remaining utilities required to support the unit. Preliminary information is available in the enclosed Pre-FEED reports.

2. Transportation of ISBL modules from ISBL FEED contractor's mod yard during construction phase of the project and installation at project site.
3. All the underground scope for Dehydrogenation unit including but not limited to civil works, foundation design, underground drain systems and fire water ring. Contractor will coordinate with ISBL FEED contractor for exchange of information.
4. Hydrogen pipeline from dehydrogenation unit battery limits to hydrogen network pipeline including hydrogen metering skid.
5. Design and supply of all the battery limit interface in coordination with ISBL FEED contractor and terminal operator.
6. Coordinate with terminal operator for the supply coordinates for LOHC, natural gas, product hydrogen and utilities supplied by the terminal operator.
7. Coordinate with ISBL FEED contractor for any other special requirements for the unit.
8. Coordinate with terminal operator for sharing control room and other offsite facilities such as warehousing, maintenance workshops, laboratories etc.…

### 2.2.6 Major scope exclusions for Dehydrogenation Unit

1. All the LOHC storage and pumping at dehydrogenation sites. The storage is available at both the sites and will be by terminal operator.
2. Loading and unloading operation of LOHC (both toluene and MCH) as this will be done by the existing jetty operators.
3. Design of ISBL unit which will be done by the ISBL FEED contractor which will use modular approach.

BoP-OSBL Contractor shall refer to Pre-FEED reports and define the exact scope for each Dehydrogenation site.

### 2.2.7 Timeline for Dehydrogenation FEED

As mentioned in ISBL Dehydrogenation scope above (Section 2.1), the ISBL FEED contractor shall start with Process Design Package (PDP). The work for BoP-OSBL FEED contractor will start only after ISBL FEED contractor switches from PDP and starts FEED phase. Thus, BoP and OSBL FEED work may start at a later date as compared to Come By Chance site.

*Note on sizing of Utilities:*

Since the FEED for ISBL scope is being performed on dual FEED basis, there will be two utility and other related summaries such as emissions, effluent, chemical etc… for each unit.

BoP-OSBL FEED contractor shall ensure that the utilities design covers entire envelop of these summaries. In case the difference in utilities is high then FEED contractor may consider modular design so that utilities design can be quickly adjusted depending upon the finally selected ISBL FEED design e.g. cooling tower number of cells and cooling water pumps, boiler sized to remove or add according to the requirement.

BoP-OSBL FEED contractor shall ensure that plot plan design is adjusted for final utilities adjustment.

## 2.3 Key BoP-OSBL Scope Elements

The selected BoP-OSBL FEED contractor will be responsible for performing, at a minimum, the following scope elements for the FEED package:

- **Process Design:** Develop the process design for the BoP for the HGP, hydrogenation and dehydrogenation units and utilities. This includes establishing the design basis, preparing process flow diagrams (PFDs), heat and material balances.
- **Equipment and Facilities Engineering:** Perform preliminary design and specification of all major equipment and systems. This covers heat exchangers, distillation columns, drums, vessels, pumps, compressors and any specialty equipment, and any other critical equipment. Contractors shall size and specify equipment based on the design criteria, and provide general arrangement drawings, equipment datasheets, and layouts.
- **Integration and Utilities:** Design the integration of common facilities available at respective sites with HGP, hydrogenation and dehydrogenation units. This includes all required utility systems (electric power, cooling, heating, inert gas, etc.), controls and instrumentation, safety systems (fire and gas detection, emergency shutdown systems), and any required infrastructure (such as storage for hydrogen-rich and hydrogen-lean carrier, loading/unloading facilities as applicable). The FEED shall ensure that the two process units are properly interfaced and that the overall facility operates safely and efficiently as a single system at each location.
- **Safety, Health, and Environment:** Incorporate best-practice safety and environmental design principles. Conduct preliminary hazard identification and operability studies (HAZID/HAZOP) during the FEED to ensure the design meets all safety requirements. Consider environmental controls for emissions, effluents, and waste associated with the HGP and LOHC processes (for example, any vented gases or spent catalysts) in compliance with relevant regulations and standards.

- **Project Deliverables Preparation:** Prepare all required FEED deliverables (as detailed in Section 4) including engineering documents, drawings, specifications, and reports. The FEED packages developed by each contractor should be sufficient in detail and quality to enable North Atlantic to confidently assess the feasibility, obtain accurate cost estimates, and proceed to EPF roll over or EPC bidding and execution after FEED.
- **Coordination and Reviews:** Coordinate with North Atlantic's project team and ISBL FEED contractors for data exchange, design reviews, and interface management. The contractors will participate in periodic progress reviews and a final FEED review with North Atlantic. Contractor is expected to proactively identify any scope ambiguities or required project decisions and engage with North Atlantic to resolve them during the FEED phase.
- **Schedule and Reporting:** Develop and adhere to a FEED schedule that meets North Atlantic's overall project timeline objectives. Provide regular progress reports to the North Atlantic, highlighting accomplishments, upcoming work, and any issues or risks that need attention. Maintain quality management throughout the FEED in line with the contractor's QA/QC procedures and North Atlantic's expectations.

Each FEED contractor's scope for FEED phase concludes with the handover of a complete FEED package and associated documentation as per Section 4 (Technical Deliverables). North Atlantic expects that the scope will be executed in accordance with international engineering standards and that the deliverables will reflect a high-quality, thoroughly vetted design ready for advancement to the implementation stage.

## 2.4 ISBL Boundary Definition

To ensure consistent bidder understanding, the following clarifies the division of scope between the ISBL technology licensor(s) and the BoP-OSBL FEED contractor.

The ISBL scope - fully owned by the technology licensor - includes:

- Process units and piping within unit battery limits (BLs),
- In-unit utility systems (e.g., internal cooling, heating, instrument air),
- In-unit LOHC storage (if applicable),
- ISBL relief and vent systems, including above-ground drains up to underground tie-in points,
- All electrical, instrumentation, and control systems up to junction boxes, motor control centers (MCCs), or substations,
- Reactor, distillation column, and core process equipment specifications,

- Process chemistry, conversion efficiency, and operating philosophy.

The BoP-OSBL FEED contractor shall NOT design or specify ISBL process technology. Instead, the contractor shall:

- Receive interface data (loads, footprints, utility summaries, emissions, etc.) from the licensor,
- Produce an Interface Register covering all BL interfaces (piping, electrical, civil, controls),
- Design all the ISBL area foundations and civil works including any underground system such as fire water, underground drain systems including closed hydrocarbon drains,
- Ensure seamless integration of ISBL modules into the overall facility layout and utility network.

See Figure 2-1 and 2-2 for high level Block Flow Diagrams (BFD) outlining the RFP boundaries for both the Come By Chance and European Facilities.

Contractors shall produce an Interface Register covering all external interfaces (wind farm, grid, terminals, marine loading, hydrogen network) for piping, electrical, instrumentation and civil engineering.

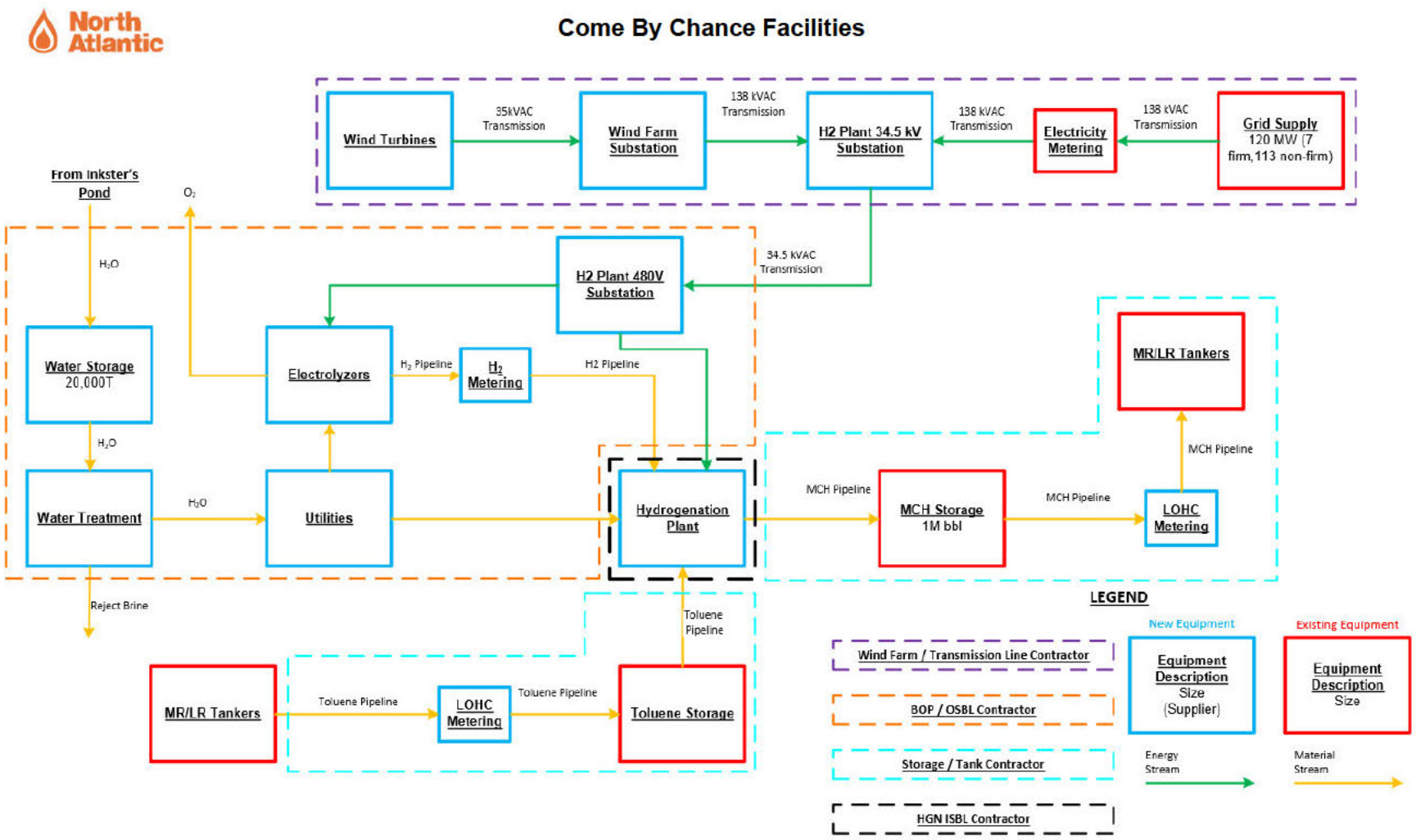


*Figure 2-1: Come By Chance FEED Scopes BFD*

## Europe Facilities

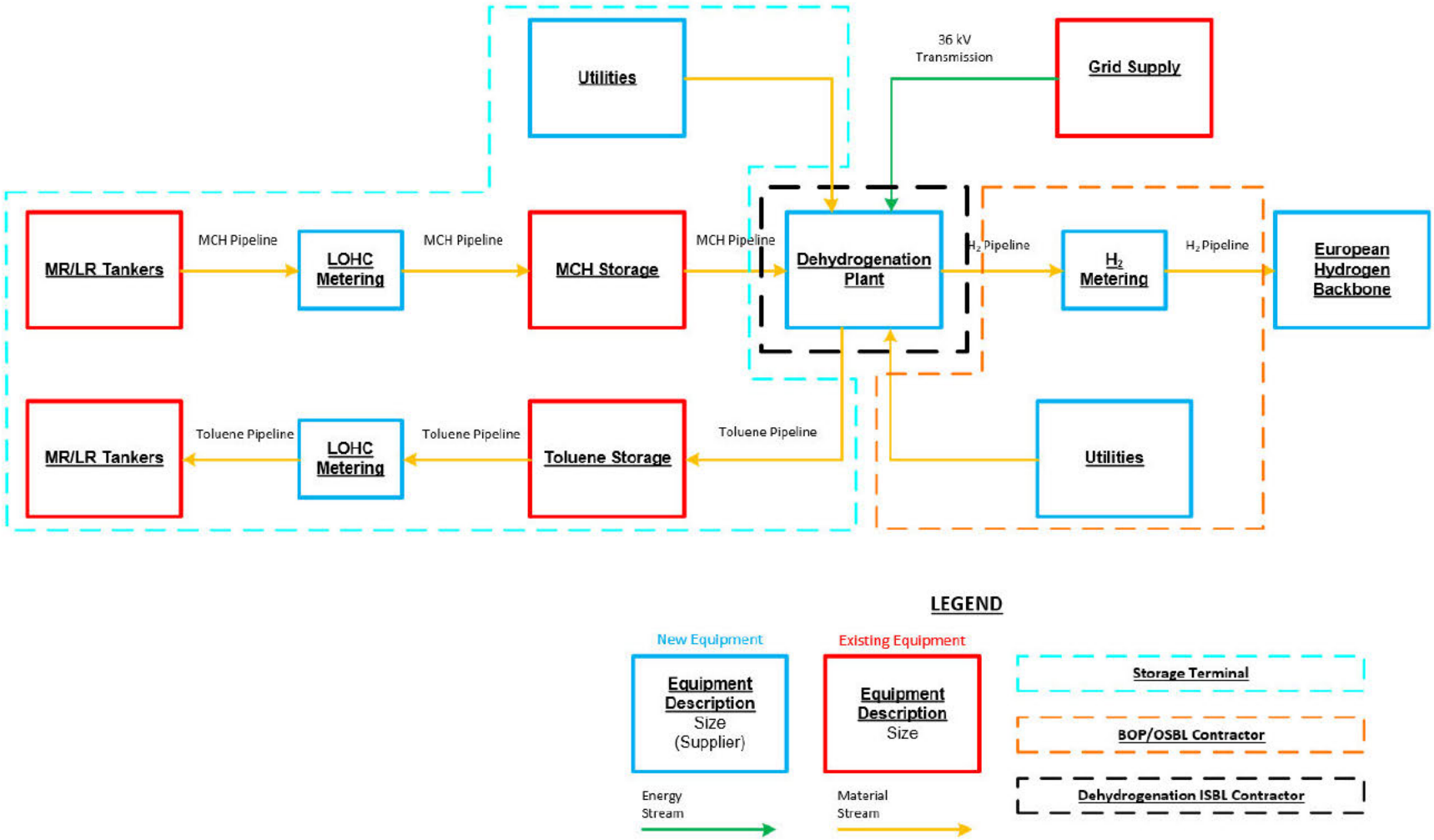


*Figure 2-2: Dehydrogenation FEED Scopes BFD (Europe)*

## 2.5 Permitting and Environmental Support

North Atlantic will lead permitting process; however, the contractor shall provide technical inputs including but not limited to:

- Emissions inventories
- Technical process descriptions
- Plot plans and key drawings
- Environmental and safety study inputs

# 3 Proposal Submission Requirements

Bidders shall prepare a clear and comprehensive proposal in response to this RFP. The proposal must be organized into two parts – a Technical Proposal and a Commercial Proposal – and should address all requirements outlined below. All proposals must be written in English with a professional and concise style, free of marketing fluff and extraneous information.

## 3.1 Technical Proposal

The Technical Proposal should detail the bidder's approach, capability, and technical solution for executing the FEED. It should include:

- **Introduction and Understanding:** A brief executive summary of the proposal, outlining the bidder's understanding of the project and the RFP objectives. Highlight any unique aspects of the proposed approach or technology.
- **Bidder Experience and Qualifications:** An overview of the bidder's relevant experience, particularly in designing supporting systems for LOHC technology or similar hydrogen-related projects. Include a summary of past projects or case studies (without referencing specific client names or locations) that demonstrate the bidder's capability to deliver FEED and subsequent project phases for comparable process facilities. Emphasize any successful hydrogenation/dehydrogenation plant supporting designs or hydrogen infrastructure projects completed by the bidder. Also, contractor shall include an organization chart showing execution model with resource allocation and CVs of key project personnel.
- **Scope Execution Plan:** A detailed plan for how the bidder will execute the FEED scope of work. This should include the proposed project organization and team structure (identifying key personnel and their roles/qualifications), the design methodology, and how the bidder will manage interface with HGP, hydrogenation and dehydrogenation design,

as well as interface with North Atlantic. Provide a preliminary project schedule for the FEED activities, showing key milestones, deliverables, and reviews. Describe type of digital tools or software and data environment to be used (e.g. process simulation software, P&ID drafting, 3D modeling, etc.).

- **Deliverables and Quality Assurance:** Confirm understanding of the required FEED deliverables (Section 4) and describe the bidder's internal quality assurance process to ensure deliverables are completed to a high standard. If the bidder has standard deliverable lists or templates, the proposal may reference them (to be provided in the appendix of the proposal if needed). Discuss how the bidder will incorporate safety and regulatory compliance in the design process.
- **Risk Management:** Identify any major risks or challenges foreseen in this FEED or the subsequent project execution (for example, scale-up of new technology, supply chain for key equipment, etc.) and describe strategies to mitigate them.
- **Interface Management**: Contractor will develop a framework for an interface management plan to interchange required project data between various other FEED contractors on timely basis and create various interface tables such as battery limit tables, civil loads, utility summaries, electrical loads, emissions summary and relief load summary necessary to maintain the overall project schedule.

  The plan shall also contain the interface or coordination with the owner team on regular basis as well as request for information required from North Atlantic to carry out FEED scope.

- **Execution to EPC Transition:** Although the RFP is for FEED services, briefly describe how the bidder envisions the transition from FEED to EPC/M phase. Outline any continuity plan or advantages the bidder's organization offers for moving into the EPC/M phase (such as having module construction management capability, established procurement networks for equipment, etc.). This section helps demonstrate the bidder's ability to support the project beyond FEED.
- **Assumptions, Clarifications and Deviations:** Contractor shall provide complete list of all the Assumptions, Clarifications, and Deviations to the RFP explaining the reasons with any benefits to the project.

The Technical Proposal should be structured and paginated clearly, with a table of contents and section headings corresponding to the points above. All pages should be numbered. Any

confidential or proprietary content in the proposal should be minimized and, if necessary, clearly marked.

## 3.2 Commercial Proposal

The Commercial Proposal must contain all relevant financial and commercial information. It should include:

- **FEED Pricing:** A lump-sum price (or other agreed pricing structure), if requested by North Atlantic for execution of the complete FEED scope of work as defined in this RFP. The price should be inclusive of all labor, subcontracts, licenses, software, travel, overheads, and profit. Provide a breakdown of the lump sum price into major categories (e.g. engineering man-hours/costs, specialist sub-consultants, studies, etc.) for transparency. Proposal shall clearly mention the main execution center and offshore or high value center cost breakdown and manhour costs. Refer to Form C-2 in Attachment 3 for indicative rate schedule.

  Contractor shall include the pricing in a specified currency (e.g. USD is preferred) and whether it is subject to any exchange rate conditions or inflation adjustments if the FEED extends over a certain time along with all the tax considerations. Contractor shall also specify foreign exchange assumptions for EUR exposed costs.

- **Payment Schedule:** A proposed milestone payment schedule or invoicing plan for the FEED. Payments may be tied to key deliverables or progress milestones (e.g. % completion of FEED, draft deliverables, final deliverables).
- **Commercial Terms and Exceptions:** A clear statement of compliance with the RFP's commercial and contractual terms (Section 7). The bidder should explicitly confirm acceptance of the draft contract terms provided in the attachments or enumerate any exceptions or deviations they propose. Any exceptions to terms will be considered in the evaluation and may affect the bidder's standing.
- **Technology Licensing and Royalties:** If the bidder's proposal involves any proprietary technology licenses, catalysts, or patented equipment for the project, the Commercial Proposal should outline the intended licensing terms or fees. This includes any one-time license fee for the technology usage, royalties per unit of hydrogen throughput (if applicable), or costs of proprietary catalyst supply for initial fill and subsequent operations. These costs can be presented as part of the FEED proposal or as separate information but must be clearly disclosed for North Atlantic's consideration.

- **Future EPC Phase Commitments:** While not required at this RFP stage, the bidder may provide any indicative proposal or commitments for the EPC phase to demonstrate the competitiveness of their overall offering. For example, the bidder can indicate their openness to a lump-sum contract or other execution models, provide a level 4 cost estimate based on current knowledge, or propose performance guarantees for the plant. Such information, if provided, will be treated as indicative and used to understand the bidder's full project capability.
- **Validity and Schedule:** State the validity period of the proposal (which should be sufficient to cover the RFP evaluation and award period, e.g. 90-120 days). Also confirm the bidder's availability to commence work immediately upon award and any assumptions on schedule (for instance, a FEED duration of X weeks from award to completion). All Commercial Proposals must be submitted separately from Technical Proposals (e.g. in a separate file or sealed envelope if physically delivered) to ensure objective evaluation. No pricing information should appear in the Technical Proposal. Proposals should be submitted by the deadline specified by North Atlantic, in the manner (electronic portal/email) indicated. Late submissions or submissions that do not follow the requirements may be disqualified. Each bidder is responsible for ensuring their proposal is complete and compliant with all requirements of this RFP.

# 4 Technical Deliverables (FEED Outputs)

By the conclusion of the FEED phase, the selected contractor shall produce a comprehensive set of technical deliverables. These deliverables will form the basis for the project's investment decision and the input to the EPC phase. The required FEED deliverables include, but are not limited to, the following:

- **Design Basis Memorandum:** A complete Basis of Design document covering all key design criteria for the project. This includes all the utilities supply and design parameters (quality, temperature, pressure etc.…), design capacity, site conditions (environmental data, utilities available, design ambient conditions), and any specific client requirements or standards to be adhered to. This document will be the reference for all subsequent design work.
- **Process Flow Diagrams (PFDs):** Diagrams for the utilities and offsites, showing all major equipment and process / utility streams. Accompanied by corresponding detailed heat and

material balance sheets for each major operating case (e.g. normal operation, turndown, startup/shutdown as relevant).

- **Piping and Instrumentation Diagrams (P&IDs):** Issued for Design P&IDs for all process and utility systems in the scope accompanied by line lists. These should illustrate equipment items, piping, instrumentation, control loops, safety valves, and interlocks. Each FEED package should have complete P&IDs that will later be refined in detailed design.
- **Equipment Datasheets and Specifications:** Issued for Design datasheets for all significant equipment, including, pumps, compressors, heat exchangers, pressure vessels, storage tanks, fired heaters, package units and filtration or purification units. Each datasheet should specify design and operating parameters, materials of construction, design codes, and utility requirements. Vendor quotes or budgetary pricing for key equipment should be obtained during FEED to support the cost estimate.
- **General Arrangement and Plot Plan:** Drawings showing the proposed layout of the facility, including equipment footprints, elevations, and routing of major piping runs. The plot plan should illustrate the optimized arrangement of the utility systems, storage areas for LOHC (if required), flare system, control room, substation, and any other ancillary facilities. Ensure that layout considerations include safety spacing, access for maintenance, and future expansion if relevant. BoP-OSBL contractor shall coordinate with LOHC ISBL FEED contractor and Electrolyzer OEM for obtaining the footprint for ISBL units and other OSBL requirements.

  Contractor shall develop FEED level 3D model (typically 30% stage) for layout, safety spacing, access, maintenance space such as exchanger bundle pulling, modularization and clash review, etc.

- **Instrumentation and Control Philosophy:** A narrative or document describing the overall control strategy for the facility, including how the utility units will be monitored and controlled. Identify the proposed automation system platform (DCS/PLC) and any advanced control or safety instrumented systems (SIS) intended. Include an alarm and safeguarding philosophy, and basic cause & effect matrices for critical shutdowns along with preliminary description (to be detailed in EPC phase).
- **Electrical and Utilities Design:** Key one-line diagrams for power distribution showing how major electrical loads (compressors, pumps, etc.) will be fed. Coordinate with LOHC ISBL FEED contractor and Electrolyzer OEM to receive estimate for ISBL loads and

include load lists for electrical power and summaries of other utility consumption (water, steam, fuel gas, etc.). Specify any new utility systems or utility upgrades needed. If the project requires a power supply arrangement or backup generators, include conceptual designs for those.

- **Utility and Chemicals Summaries:** Coordinate with LOHC ISBL FEED contractor and Electrolyzer OEM to estimate total site requirements of utilities and chemicals during start-up, shutdown and normal operations for ISBL facility to support the design of ISBL FEED contractor.
- **Emission and Effluent Summary:** Coordinate with LOHC ISBL FEED contractor and Electrolyzer OEM to estimate total continuous and intermittent plant emissions, liquid and solid effluents for entire site.
- **Relief Load Summary:** Coordinate with LOHC ISBL FEED contractor and Electrolyzer OEM to estimate total relief load from each of site including preliminary datasheets of relief valves in OSBL area. The summary should describe various relief scenarios considered for the design.
- **Safety Studies and HSE Plan:** Documentation of the HAZOP study findings and recommendations conducted during FEED (or plan for it if scheduled late in FEED). A preliminary hazard analysis and risk assessment report covering major accident scenarios (e.g. hydrogen leaks, fires, etc.) and how the design mitigates them. Additionally, an outline of the environmental management plan, noting any emissions or effluents expected and design provisions to minimize environmental impact. Ensure compliance with all relevant safety standards (such as process safety requirements, hazardous area classification for electrical design, etc.).
- **Project Execution Plan (FEED Phase and Beyond):** A document detailing how the project can be executed in the next phases, building on the FEED results. This includes a proposed contracting strategy (if the FEED contractor were to carry on, or the strategy if it goes to market), module construction plan overview, module construction sequencing, and commissioning/startup plan at a high level. While much of execution planning will be refined post-FEED, the FEED contractor should highlight any important execution considerations discovered during FEED (for example, any unique construction requirements for the chosen technology).
- **Project Schedule:** An updated level 3 project schedule covering the FEED work (as executed) and a proposed timeline for detailed engineering, procurement, module construction, and commissioning. This schedule should validate that the project can be

delivered within the timeframe expected by North Atlantic. Key milestones (like long-lead equipment orders, permitting, etc.) should be identified.

- **Cost Estimate:** (See Section 5 for details) A detailed cost estimate for the capital project, developed to a Class 3 accuracy or better. This should include a breakdown of costs by discipline or by area (utilities, offsites, etc.), including direct costs (equipment, bulk materials, construction labor) and indirect costs (engineering, procurement, construction management, contingencies). The estimate must be accompanied by an explanatory basis of estimate document listing the assumptions, exclusions, sources of cost data (vendor quotes, factors, benchmarks), applied contingency and its rationale, and an estimate of accuracy range.
- **Interface Register** – A Battery Limit interface tables covering all the technical interface boundaries between ISBL and OSBL areas.
- **Others:** Any additional documents and /or deliverables that are necessary to support cost estimate and for a complete FEED package, such as:
    - Line lists, valve lists, instrument indexes.
    - Preliminary piping layouts or isometrics for critical lines (if any high-risk or long-lead piping items).
    - Material selection diagrams or corrosion study results for handling hydrogen and LOHC chemicals.
    - A 3D model review summary or screenshots, to demonstrate design completeness and allow North Atlantic to visualize the facility.
    - Commissioning and Decommissioning considerations for the HGP and LOHC facilities (like how initial fill and regeneration cycles will be handled).

All deliverables should be provided in both native format (e.g., CAD drawings, Excel datasheets or software used) and compiled format (PDF files for documents and drawings). The FEED contractors shall ensure that the deliverables are sufficiently detailed and meet industry standards so that the next phase engineering teams (whether the same contractor or others) can seamlessly take the design forward.

At the end of FEED phase, contractor shall handover all the FEED deliverables data including tag register, equipment list, line list, instrument index, I/O list in machine-readable formats.

# 5 Cost Estimation

A critical outcome of the FEED phase is a robust cost estimate, and each FEED contractor is required to develop and provide a comprehensive cost estimation as part of their deliverables (referenced in Section 4). The expectations for the cost estimate are as follows:

- **Accuracy and Classification:** The cost estimate should be developed to an expected accuracy of approximately -10/+15% (typically corresponding to a Class 3 estimate as defined by AACE International or similar industry classification). The estimate should reflect the level of definition achieved during FEED and be suitable for budget authorization and investment decisions.
- **Scope Coverage:** The estimate must cover the entire scope of the project as defined in FEED, including utility systems and any other project components outside battery limit area (OSBL). It should also include costs for site preparation, transportation, and installation, as applicable. Contractor shall provide cost estimate for both the units separately and then provide combined cost estimate showing benefits achieved, if any due to integration of the design development and module construction.
- **Cost Breakdown:** Provide a structured breakdown of the total installed cost. This breakdown may be organized by:
  - **Discipline:** e.g., civil/structural, mechanical, piping, electrical, instrumentation, etc.
  - **Facility Area:** e.g., by utility systems, storage areas, electrical substation etc.
  - **Cost Categories:** e.g., equipment, bulk materials, labor, engineering, construction management, contingency, etc. The breakdown should be detailed enough to facilitate analysis and understanding of cost drivers.
- **Basis of Estimate:** Accompany the numerical estimate with a Basis of Estimate (BOE) document as follows:
  - Base currency (USD / CAD) for all costs.
  - Base date clearly stated.
  - FX assumptions for EUR-denominated costs.
  - Sensitivity analysis for FX variations.
  - Clear statements regarding duties, customs and indirect taxes.
  - Explicit listing of exclusions, owner-furnished items and assumptions.

The BOE should clearly state all assumptions and inclusions, such as: design basis for costing (capacity, design conditions), source of pricing data (vendor quotes for major equipment, cost databases for bulk materials and labor unit rates, etc.), assumed labor productivity and working hours, any location factors or adjustments used (without naming specific countries, just general conditions), contingency philosophy, and escalation if assumed. Note any costs excluded (e.g., land acquisition, certain owner costs like licensing fees if not included, etc.) and any specific risk allowances.

- **Operational Costs Estimate:** In addition to CAPEX, provide an estimate or analysis of expected operational costs (OPEX) for the facility. This includes estimated utilities consumption (and costs), catalyst or chemical consumption (e.g. periodic replacement of LOHC or catalyst if applicable), manpower requirements for operation, maintenance costs, etc. This information will help in evaluating the life-cycle cost effectiveness of the proposed technology.
- **Validation and Benchmarking:** The contractor should perform basic validation on the estimate, such as benchmarking key metrics (e.g., cost per ton of hydrogen, or per kW of throughput) against industry data or similar projects (if available). All such comparisons should be presented in generic terms without reference to specific projects. Identify any areas of significant cost uncertainty or potential opportunities for cost optimization that were observed during FEED.
- **Review and Iteration:** The cost estimate should undergo the contractor's internal review process (with cross-discipline input) to ensure completeness. The final estimate will be reviewed with North Atlantic as part of the FEED completion, and contractors should be prepared to discuss and justify the estimate details. North Atlantic may engage an independent reviewer to audit the estimates for fairness and accuracy.

Bidders are expected to put forward their best effort in providing a reliable and well-documented estimate. North Atlantic emphasizes transparency in the estimate; any use of allowances or factors should be clearly explained. The currency for all cost reporting shall be [specified currency, e.g., USD], and costs should be based on price levels of 2026. No inflation escalation should be included beyond this point for comparison purposes, unless specifically requested by North Atlantic.

# 6 Execution Approach

This section describes the intended project execution strategy and how the FEED process will be managed by North Atlantic. Bidders should read this carefully, as it sets the context for how their work will feed into the larger project timeline and decision-making process.

- **FEED Timeline and Coordination:** The expected duration of the FEED phase is approximately 6 months or better from kick-off to final deliverables. During this period, North Atlantic will assign a dedicated owner's team to interface with the BoP-OSBL FEED contractor. Regular coordination meetings (e.g., weekly progress calls and monthly formal reviews) will be conducted to monitor progress, clarify any questions, and ensure alignment with project objectives. Key milestones during FEED may include Kick-off Meeting, Design Basis Freeze, Mid-way Design Reviews (PFD, P&IDs, Single Line Diagrams, etc.), HAZOP completion, 3D Model Review (as applicable), Draft Deliverables Submission, and Final FEED Completion Review.
- **Interim Deliverables and Reports**: FEED contractor will be expected to submit interim deliverables or summary reports at defined milestones (for instance, a 30% design review package or a preliminary cost report mid-way through FEED). This allows North Atlantic to track whether the designs are evolving in a direction that meets the project requirements. Feedback from North Atlantic at these stages will be provided to the contractor, focusing on clarifications or requested adjustments.
- **Evaluation and EPC Selection:** Upon FEED completion, once contractors will have delivered their FEED package including technical designs, cost estimates, and execution plans, North Atlantic will then conduct a thorough evaluation of the outcome. Criteria will include technical viability, cost-effectiveness, execution risk, and alignment with the North Atlantic's strategic goals (the same general areas outlined in Section 8 for proposal evaluation will also guide the FEED outcome evaluation). North Atlantic's intent is to select the EPC/M contractors to proceed to the next phase of the project, with a separate tender for EPC where the FEED contractor may have a distinct advantage.
- **Technology and Intellectual Property:** During execution, any proprietary technology information provided by the FEED contractor will remain confidential. North Atlantic will ensure that intellectual property rights are respected: the selected design will be used solely for North Atlantic's project implementation. North Atlantic will not share or use the losing contractor's detailed design for execution, beyond extracting any general lessons

or data that are not proprietary. Bidders should be assured that the FEED bidding approach is intended to select the best option, not to mix designs or divulge trade secrets.

- **Future Collaboration:** North Atlantic encourages the FEED contractor to maintain a collaborative stance with North Atlantic throughout the FEED. In case the project scope is expanded or if future similar projects arise, there may be opportunities for the contractor beyond this specific competition. Thus, even though this is a competitive FEED, maintaining professionalism and quality throughout is in the long-term interest of all parties.

The above approach is provided to ensure transparency on how the FEED will be executed. Bidders should align their proposals and internal planning to this execution strategy. Any concerns or suggestions regarding the execution approach can be addressed during the RFP clarification period prior to the proposal submission deadline.

# 7 Commercial Terms

This section summarizes key commercial and contractual terms that will govern the FEED contract and highlights important conditions for this RFP. Bidders must carefully review these terms and ensure their Commercial Proposals are compliant or note any exceptions explicitly.

- **Contract Structure:** The contract awarded for the FEED services to the selected bidder will be a standalone agreement based on a bidder's standard FEED contract format. It is anticipated to be a fixed-price (lump sum) contract for the defined FEED scope. Bidders should account for all costs in their lump sum price, as no additional compensation will be provided for completing the scope aside from agreed variations.
- **Payment Terms:** Payments for FEED services will be made against milestones or progress as outlined in the contract. Bidders may propose a milestone payment schedule in their Commercial Proposal, which will be subject to negotiation. Typically, a portion of the payment is tied to contract award/kickoff (mobilization), with subsequent payments upon intermediate deliverables and a final payment upon acceptance of all FEED deliverables. North Atlantic may retain a small percentage of each payment (retainage) until final completion as a performance security.
- **Confidentiality and Data Use:** All data provided by North Atlantic to bidders (including in this RFP and attachments) and all data developed by contractors during FEED must be kept confidential and used solely for the purposes of this project. The FEED contract will

include confidentiality provisions binding the contractor. Similarly, North Atlantic will treat the bidders' proprietary technical information confidentially.

- **Intellectual Property Rights:** Any intellectual property (IP) or proprietary technology brought by the contractor for the purpose of the project remains the property of the contractor. However, all FEED work products (documents, models, drawings, calculations) developed under the FEED contract will become the property of North Atlantic upon payment. North Atlantic will receive an unrestricted right to use the FEED deliverables for executing the project. If licenses are required for the technology to build or operate the facility, the commercial terms of such licenses should be identified in the proposal and will be included in the contract negotiations.
- **Liabilities and Warranties:** The FEED contract will define the liability of the contractor for its work. Bidders shall state their standard liability positions, and professional indemnity limits/duration. Typically, the contractor will be liable for the consequences of errors or omissions in the FEED deliverables. Bidders should carry professional indemnity insurance and provide proof of such insurance if requested. The FEED contract may also include warranties that the work is performed in a professional manner and that the deliverables will meet the specified requirements. Any performance guarantees for the technology (e.g. efficiency, capacity) will primarily be formalized in the subsequent EPC phase, but bidders should stand behind the technical viability of their FEED designs.
- **Governing Law and Arbitration:** The contract and all matters arising in connection herewith, including validity and enforcement, will be governed by, interpreted and construed in accordance with the laws of the Province of Newfoundland and Labrador, without giving effect to any conflicts of laws principles that would result in the application of a different law. Disputes that cannot be resolved amicably will be settled by arbitration under a recognized international arbitration body or rules. Bidders shall accept the proposed governing law and dispute resolution mechanism.
- **Health, Safety, Security & Environment (HSSE):** Contractor must perform their work in compliance with all applicable HSSE laws and regulations. While most FEED work is office-based, if any site visits or field work is required during FEED, the contractor must adhere to North Atlantic's safety requirements. No alcohol, drugs, or other prohibited activities are allowed on site. The contract will include standard HSSE requirements, and the contractor shall have to provide an HSSE plan if performing any on-site activities.
- **Code of Conduct and Compliance:** Bidders and their personnel must conduct business in a responsible and ethical manner. North Atlantic expects compliance with anti-bribery,

anti-corruption laws (e.g., not offering any inducements to North Atlantic employees or stakeholders), and adherence to international standards for business conduct. The contract will have clauses addressing these compliance requirements. Any conflict of interest must be disclosed. North Atlantic reserves the right to disqualify a bidder or terminate a contract if any compliance violations are discovered.

- **Reservation of Rights:** North Atlantic reserves the right to accept or reject any and all proposals, to negotiate contract terms with the selected bidders, and to award or not award the FEED contract at its sole discretion. Issuance of this RFP and even selection of contractor for FEED does not commit North Atlantic to proceed with the project to EPC or beyond. North Atlantic may also choose to terminate the project or the FEED contract at any stage, subject to fair compensation for work done, if business circumstances warrant.
- **Clarifications and Amendments:** Bidders may seek clarification on the RFP by submitting questions in writing by the date specified (in the RFP schedule or instructions). North Atlantic will issue clarifications or amendments to all bidders to ensure a fair and transparent process. All such addenda become part of the RFP requirements and must be acknowledged in the proposal. Bidders are advised to regularly check for any updates before finalizing their submissions.

Bidders should review the attached draft contract and ensure that their proposals either accept the terms or flag specific exceptions. Extensive exceptions or unwillingness to adhere to standard terms may result in a proposal being considered less favorable. North Atlantic aims to establish a fair contract that protects both parties and ensures a successful partnership through FEED and potentially into project execution.

# 8 Evaluation Criteria

The selection of the FEED contractor through this RFP will be based on a multi-criteria evaluation to determine the best overall value to North Atlantic. The proposals will be evaluated by an evaluation committee against the following criteria (not necessarily listed in order of importance, unless weightings are specified):

- **Technical Capability and Solution (Technology Merit):** Evaluation of the proposed HGP and LOHC facilities BoP, OSBL and Offsites areas and design approach. This includes the efficiency and reliability of the design, the proven track record, novel approach, and how well the proposed design can meet the specific project requirements (capacity, safety, operability w.r.t wind power without energy storage). Bidders offering a

robust, proven solutions with clear advantages (e.g., lower energy consumption, etc.) will be rated highly.

- **Execution Plan and Schedule:** The quality and credibility of the bidder's FEED execution plan. This covers the proposed schedule (e.g. can the FEED be completed within the required timeframe?), the adequacy of the project team (skills and experience of key personnel), resource allocation, and the approach to managing the FEED work (including interface management and risk mitigation). A realistic schedule and a well-structured plan indicating a clear path to deliverables will score well.
- **Experience and Track Record:** The bidder's experience with projects of similar nature and scale. This includes successful completion of FEED and EPC/M for related process plants (especially hydrogen-related or chemical process facilities). The expertise in LOHC and related hydrogen technologies, and general engineering performance demonstrated in past projects, will be considered. Client references or performance on past projects (if known to North Atlantic or provided in the proposal) will also influence this criterion.
- **Commercial Offer:** The competitiveness and completeness of the Commercial Proposal. A key factor is the lump sum price for FEED services – North Atlantic will evaluate whether it is reasonable and within budget expectations. However, the lowest price will not automatically win; price will be considered in relation to the overall value and quality offered. The proposed payment schedule, any exceptions to contract terms, and any cost-saving offers for the EPC phase (if provided) will also be taken into account.
- **Life-Cycle Considerations:** Though the immediate selection is for FEED, North Atlantic will consider the implications of each bidder's proposal on the overall project life-cycle. This includes the anticipated capital and operating costs of the final facility (from the provided design and initial cost estimates), the ease of implementation (construction and startup considerations), and long-term operability/maintainability. A proposal that might have a higher FEED cost but leads to a significantly more economical or lower-risk project execution could be favored.
- **Compliance and Quality of Proposal:** The degree to which the bidder's proposal adheres to the RFP instructions. A well-organized, clearly written, and complete proposal that addresses all requirements is essential. Proposals that contain ambiguities, omissions, or deviations without explanation may be scored lower. The responsiveness during the RFP process (such as timely clarification questions and professional communication) will also reflect the bidder's commitment and competence.

- **Safety and ESG (Environmental, Social, Governance):** The emphasis the bidder places on safety in design and their track record for safety in engineering projects. Additionally, North Atlantic may consider the bidder's corporate commitment to sustainability and any innovative ideas to minimize the environmental footprint of the project (for instance, energy optimization in the process, use of waste heat, etc.). While these may not be primary selection criteria, a strong safety culture and alignment with North Atlantic's ESG values can distinguish a proposal.

North Atlantic may assign weighted scores to these criteria or use a qualitative ranking process.

Indicative evaluation weightings are as below:

- Technical Capability & Technology Merit – 25%
- Execution Strategy & Schedule – 20%
- Relevant Experience & Team Strength – 15%
- Commercial Offer – 30%
- HSSE & ESG Alignment – 10%

Bidders shall complete the Compliance Matrix (Attachment 3).

Bidders might be invited to an interview or clarification meeting as part of the evaluation, where they can present their proposal and address questions. Ultimately, North Atlantic will select the proposal that is deemed most advantageous, balancing both technical excellence and cost considerations.

All bidders will be notified of the outcome of the RFP. After selection, North Atlantic may offer a debrief to unsuccessful bidders upon request, to provide feedback (in general terms) on areas for improvement. North Atlantic appreciates the effort involved in preparing these proposals and will conduct the evaluation in a fair and confidential manner.

North Atlantic is committed to providing full and fair opportunities to Canadian and, in particular, Newfoundland and Labrador companies and individuals, on a commercially competitive basis. North Atlantic also encourages the participation of members of designated groups (women; Aboriginal peoples; persons with disabilities; and members of visible minorities) and corporations or cooperatives owned by them, in the supply of goods and services.

# 9 Attachments

The following attachments are listed, and some are included with this RFP to provide additional information and templates to assist bidders in preparing their proposals. Bidders should ensure they have received all documents and should incorporate the requirements and information from these attachments into their response where applicable:

- **Attachment 1: Design Basis** – Detailed project description, design basis data, and technical requirements for the LOHC facility. This document includes specifics such as hydrogen supply details, required hydrogen output specifications, preliminary site information, environmental conditions, and any predefined design standards or codes to be followed.
- **Attachment 2: Pre-FEED Deliverables List** – A list of the deliverables created during the Pre-FEED stages for Hydrogen Generation Plant, Hydrogenation Plant and Dehydrogenation Plant. These will be made available after the completion of the contractor selection process.
- **Attachment 3: FEED Deliverables List and Format Guidelines** – A list of minimum required FEED deliverables (expanding on Section 4) with expected number of revisions to ensure consistency. Contractor may propose any additional deliverables that may be required for complete FEED package.
- **Attachment 4: Proposal Templates and Forms** – A list of forms for inclusion in proposal submission, which may include a pricing breakdown form, a compliance matrix for RFP terms (where bidders indicate their compliance or exceptions to each item), and any required declarations (e.g., a no-conflict-of-interest declaration). Bidders should use these forms, where provided to structure their proposals.
- **Attachment 5: Draft FEED Contract Terms and Conditions** – A draft version of the contract terms that will be included in the signed contract with the selected FEED contractor shall include the general terms highlighted in Section 7, as well as project-specific clauses. Bidders must review these contract requirements and include any comments or requested modifications as part of their proposal (as noted in Section 3.2, Commercial Proposal).
- **Attachment 6**: **Health, Safety, Environment and Quality (HSEQ) Questionnaire** – A mandatory corporate HSEQ form is provided. If applicable, any additional attachments such as HSE requirements, design standards, etc., would be listed here.

This RFP document, along with its attachments, constitutes the complete set of requirements for the FEED for the LOHC BoP-OSBL and Offsites facilities. Bidders are expected to carefully review all sections and attachments. North Atlantic looks forward to receiving well-prepared proposals from capable bidders and proceeding with the successful execution of the dual FEED process.

## Attachment 1: Design Basis

***Provided as a Separate Document***

# Attachment 2: Pre-FEED Deliverables

# Attachment 3: FEED Deliverables List, Format Guidelines and Minimum Number of Revisions

## Structure, Drafting, and Review Requirements

1. Language: English
2. Units: SI (mandatory)
3. Drawing Format: ISO A-series / PDF and native
4. Document Control:
    a. Title block with: Document Number, Revision, Date, Author, Checker, Approver
    b. Revision history with description of changes
    c. “Issued for FEED” stamp
5. 3D Model Requirements:
    a. AVEVA E3D or equivalent
    b. 30% FEED design review snapshots
    c. Model export in IFC format

## FEED Deliverables Register (Full List)

### Table A3.1 Project Management and Execution

| Deliverable | Description | Format |
|---|---|---|
| Project Execution Plan (PEP) | Full FEED execution methodology | PDF + Native |
| Interface Management Plan | Interfaces between hydrogenation/dehydrogenation units, utilities, FEED contractor and owner teams | PDF |
| Risk Register & Mitigation Plan | Identification and ranking of risks with mitigation actions | Excel + PDF |
| FEED Schedule (Level 3) | Resource-loaded schedule; critical path | Primavera (.xer) + PDF |
| FEED Progress Reports | Monthly progress; S-curves; risks | PDF |
| Change Management Procedure | FEED variation control | PDF |

### Table A3.2 Process Engineering

| Deliverable | Description |
|---|---|
| Design Basis Memorandum | Process, operating, and design criteria |
| Process Design Criteria | Codes and Design Margins |
| Process/Utility Flow Diagrams (PFD/UFDs) | With stream tables and H&MBs |

| Deliverable | Description |
|---|---|
| Heat & Material Balances | For all cases: normal, turndown, startup |
| Piping & Instrumentation Diagrams (P&IDs) | All systems, including shutdown functions |
| Process Descriptions | Narrative per unit |
| Utility Summaries | Electrical load, cooling, heating, instrument air |
| Chemicals Summary | Various chemicals required as dosing or for catalyst activity and performance etc... |
| Emissions and effluent Summary | Continuous or intermittent gaseous emissions and any liquid effluent discharges. |
| Process Safeguarding Memorandum | Overpressure protection, relief philosophy |
| Cause & Effect Diagrams (C&E) | Facility-level shutdowns |
| Relief Load summary and Calculations | For all PSVs |
| Control Philosophy | DCS/PLC, SIS architecture |
| Hazardous Area Classification | Drawings + basis |
| Process Simulation Files | Fully converged cases |

Table A3.3 Mechanical Engineering

| Deliverables | Content |
|---|---|
| Mechanical Equipment Datasheets | All major equipment |
| Mechanical Design Criteria | Codes, materials, design temperature/pressure |
| Rotating Equipment Specification | Compressors, pumps |
| Static Equipment Design | Vessels, reactors, tanks |
| Fired Heater/Dehydrogenation Heater Specs | Fired heaters |
| Materials Selection Diagram | Material Selection |
| HVAC Engineering | Load and equipment lists |

Table A3.4 Piping Engineering

| Deliverable | Description |
|---|---|
| Piping Material Class Index | Full MOC and ratings |
| Line List | All lines tagged, sizes, MOC |

| Deliverable | Description |
|---|---|
| Valve List | Type, MOC, class |
| Tie-in List | All battery limits |
| Specialty Items List | All piping speciality items |
| Battery Limit Interface Tables | List of all pipelines in and out of the unit |
| Plot Plan | Full site layout |
| 3D Piping Model Snapshots | 30/60/90% as applicable. |
| Stress Analysis Reports | Critical lines |

Table A3.5 Electrical Engineering

| Deliverable | Description |
|---|---|
| Electrical Design Criteria | Codes and Standards, Power System Philosophy |
| Electrical Load List | All equipment |
| One-Line Diagrams | MV/LV systems |
| Substation Layout | If applicable |
| Earthing Study | Calculations + layout |
| Cable Routing Plan | Trays, sizing, segregation |
| Hazardous Area Electrical Review | Compliance |

Table A3.6 Instrumentation & Control

| Deliverable | Description |
|---|---|
| Instrumentation Design Criteria | Codes and Standards, Control System Philosophy |
| Instrument Index | Complete list |
| I/O List | With DCS/SIS segregation |
| Control Narratives | All process units |
| SIS Architecture & SIL Assessment | LOPA results |
| Instrument Datasheets | All field devices |
| Interlocks and Logic Diagrams | Shutdown, permissive logic |

### Table A3.7 Civil/Structural

| Deliverable | Description |
|---|---|
| Design Basis | Contractor to provide required information for BoP FEED contractor such as Loads, etc. |
| Geotechnical Interpretation | From owner's survey |
| Foundation Design | Contractor to provide required FFED level civil load information to BoP FEED contractor |
| Structural Steel Plans | Units, pipe racks |
| Roads, Drainage, Paving Layout | By BoP FEED contractor. Contractor to provide required information. |

### Table A3.8 Safety & Environment

| Deliverable | Description |
|---|---|
| HAZID Report | Early-phase hazard identification |
| HAZOP Report | Full node-by-node |
| LOPA Report | SIL assignment |
| Quantitative Risk Assessment (QRA) | Fire/explosion modeling |
| Environmental Impact Memorandum | Emission sources and controls |
| Fire Protection Layouts | F&G device, hydrants, extinguishers |

### Table A3.9 Cost & Estimating

| Deliverable | Description |
|---|---|
| Class 3 CAPEX Estimate | -10/+15% |
| BOE (Basis of Estimate) | Assumptions, factors |
| Vendor Quotes (Major Equipment) | 3 competitive quotes (where possible) |
| OPEX Estimate | OPEX |

### Table A3.10 FEED and EPC/M Schedule

| Deliverables | Description |
|---|---|
| FEED Schedule – Level 3 | Proposed FEED schedule for FEED execution |
| EPC/M Schedule – Level 3 | Expected EPC/M Schedule after FEED |

## Table A3.11 FEED Reports

| Deliverables | Description |
|---|---|
| FEED Report | Full FEED Report (Master Document) |
| Execution Recommendations | Proposed Project execution recommendations |
| Key Design Decisions Register | |
| Detailed Design Work Scope | Scope for EPF Model Execution |

## Table A3.12 FEED Deliverables – Owner Minimum Requirements

| Project Management | | | | |
|---|---|---|---|---|
| Deliverable | IFR | IFA | IFD | IFI |
| Project Execution Plan | ✓ | ✓ | | |
| Interface Management Plan | | ✓ | | |
| Risk Register & Mitigation Plan | | ✓ | | |
| FEED Schedule (Level 3) | ✓ | ✓ | | |
| FEED Progress Reports | | ✓ | | |
| Change Management Procedure | | ✓ | | |
| **Process Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Design Basis Memorandum | ✓ | | ✓ | |
| Process Design Criteria | ✓ | | ✓ | |
| Process / Utility Flow Diagrams | ✓ | | ✓ | |
| Heat & Material Balances | ✓ | | ✓ | |
| Piping & Instrumentation Diagrams | ✓ | ✓ | ✓ | |
| Process Description | ✓ | | ✓ | |
| Utility Summary | ✓ | | ✓ | |
| Chemicals Summary | ✓ | | ✓ | |
| Emissions and Effluent Summary | ✓ | | ✓ | |
| Process Safeguarding Memorandum | ✓ | ✓ | ✓ | |
| Cause & Effect Diagrams | ✓ | ✓ | ✓ | |
| Relief Load Summary and Calculations | ✓ | | ✓ | |
| Control Philosophy | ✓ | ✓ | ✓ | |
| Hazardous Area Classifications | ✓ | | ✓ | |

| Deliverable | IFR | IFH | IFD | IFI |
|---|---|---|---|---|
| Process Simulation Files | | | | ✓ |
| **Mechanical Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Mechanical Equipment Datasheets | ✓ | | ✓ | |
| Mechanical Design Criteria | ✓ | | ✓ | |
| Rotating Equipment Specification | ✓ | | ✓ | |
| Static Equipment Design | ✓ | | ✓ | |
| Fired Heater / Dehydrogenation Heater Specifications | ✓ | | ✓ | |
| Material Selection Diagram | ✓ | | ✓ | |
| HVAC Engineering | ✓ | | ✓ | |
| **Piping Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Piping Material Class index | ✓ | | ✓ | |
| Line List | ✓ | ✓ | ✓ | |
| Valve List | ✓ | | ✓ | |
| Tie-in List | ✓ | | ✓ | |
| Specialty Items List | ✓ | | ✓ | |
| Battery Limit Interface Tables | ✓ | | ✓ | |
| Plot Plan | ✓ | | ✓ | |
| 3D Piping Model Snapshots | ✓ | | | |
| Stress Analysis Reports | ✓ | | ✓ | |
| **Electrical Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Electrical Design Criteria | ✓ | | ✓ | |
| Electrical Load List | ✓ | | ✓ | |
| One-Line Diagrams | ✓ | | ✓ | |
| Substation Layout | ✓ | | ✓ | |
| Earthing Study | ✓ | | ✓ | |
| Cable Routing Plan | ✓ | | ✓ | |
| Hazardous Area Electrical Review | ✓ | | ✓ | |

| Instrumentation & Control | | | | |
|---|---|---|---|---|
| Deliverable | IFR | IFH | IFD | IFI |
| Instrumentation Design Criteria | ✓ | | ✓ | |
| Instrument Index | ✓ | | ✓ | |
| I/O List | | | | ✓ |
| Control Narratives | ✓ | ✓ | ✓ | |
| SIS Architecture & SIL Assessment | ✓ | | ✓ | |
| Instrument Datasheets | ✓ | | ✓ | |
| Interlocks and Logic Diagrams | ✓ | ✓ | ✓ | |
| **Civil / Structural** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Design Basis | ✓ | | ✓ | |
| Geotechnical Interpretation | ✓ | | | |
| Foundation Design | ✓ | | ✓ | |
| Structural Steel Plans | ✓ | | ✓ | |
| Roads, Drainage, Paving Layout | ✓ | | ✓ | |
| **Safety & Environmental** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| HAZID Report | ✓ | | ✓ | |
| HAZOP Report | ✓ | | ✓ | |
| LOPA Report | ✓ | | ✓ | |
| Quantitative Risk Assessment | ✓ | | ✓ | |
| Environmental Impact Memorandum | ✓ | | ✓ | |
| Fire Protection Layouts | ✓ | | ✓ | |
| **Cost & Estimating** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Class 3 CAPEX Estimate | ✓ | | ✓ | |
| Basis of Estimate | ✓ | | ✓ | |
| Vandor Quotes (Major Equipment) | ✓ | | | |
| OPEX Estimate | ✓ | | ✓ | |

| FEED Reports | | | | |
|---|---|---|---|---|
| Deliverable | IFR | IFH | IFD | IFI |
| Final FEED Report (Master Document) | ✓ | | ✓ | |
| Execution Recommendations | ✓ | | | |
| Key Design Register | ✓ | | | |

*IFA – Issued for Approval, IFD – Issued for Design, IFH – Issued for HAZOP, IFI – Issued for Information, IFR – Issued for Review.

# Attachment 4: Proposal Template and Forms

Bidders must complete and submit the following forms.

## Bidder's Compliance Matrix

Bidders must complete the following table showing compliance vs deviations.

| RFP Section | Requirement Summary | Complies? (Y/N) | Bidder Comment |
|---|---|---|---|
| Section 2 | Complete FEED scope | Y/N | |
| Section 3 | FEED confidentiality | Y/N | |
| Section 4 | Full deliverables submission | Y/N | |
| Section 7 | Contract terms | Y/N | |
| Attachment 4 | FEED contract acceptance | Y/N | |

## Bidder's Technical Forms

### Form T-1: Bidder Experience Summary

| Project Type | Year | Scope | Key Achievements | Client (Generic) |
|---|---|---|---|---|
| … | … | … | … | … |

### Form T-2: Key Personnel List

| Position | Name | Experience (years) | Relevant FEED Experience | Availability (%) |
|---|---|---|---|---|
| … | … | … | … | … |

## Bidder's Commercial Forms

Bidder shall submit the following forms as mentioned below in bidder's format. The minimum information required to be included is as listed in each of the sections. Some of the forms are also included for reference.

### Form C-1: Lump-Sum FEED Pricing

| Cost Category | Amount |
|---|---|
| Engineering Man-hours | |
| Specialist Subcontractors | |
| Studies & Safety | |

| Cost Category | Amount |
|---|---|
| Travel & Expenses | |
| Overheads & Profit | |
| **TOTAL FEED PRICE** | |

## Form C-2: Indicative Rate Schedule

| Items | Hydrogenation Plant (40 hour / Week) | Dehydrogenation Plant (40 Hour / week | FEED Total (40 hour/week) |
|---|---|---|---|
| 1 Project Management | | | |
| 2 Risk Management | | | |
| 3 Quality Management | | | |
| 4 Project Controls | | | |
| 4.1 Planning and Scheduling | | | |
| 4.2 Cost Estimating | | | |
| 5 Engineering | | | |
| 5.1 Engineering Management | | | |
| 5.2 Process Engineering | | | |
| 5.3 Geotechnical Engineering | | | |
| 5.4 CSA Engineering | | | |
| 5.6 Mechanical Engineering | | | |
| 5.7 HVAC | | | |
| 5.8 Piping Engineering | | | |
| 5.9 Process, Environment and Fire Safety | | | |
| 5.10 Electrical Engineering | | | |
| 5.11 Control and Automation Engineering | | | |
| 6 Procurement & Logistics | | | |
| 7 Construction Management | | | |
| 8 Information Management | | | |
| 9 Document Management | | | |
| 10 Any Other Function | | | |
| **TOTAL** | | | |

**NOTE 1:** Rate sheet at each location of work should be provided.
**NOTE 2:** Bidder to expand rate for each discipline by grade level.

## Form C-3: Payment Milestones

| Milestone | Deliverable | % Payment |
|---|---|---|
| Kickoff | Mobilization | X% |
| 30% Package | Design Basis, PFDs and HMB | X% |
| 60% Package | P&IDs, Plot Plan | X% |
| 90% Package | Cost Estimate | X% |
| Final FEED | All FEED Deliverables - final | X% |

## Form C-4: Exceptions to Contract

| Clause | Bidder Exception | Proposed Alternative |
|---|---|---|
| … | … | … |

## Form C-5: Technology Licensing Declaration

Bidders must declare:

- Whether FEED includes technology license
- Any license fee (one-time)
- Any royalty or catalyst proprietary requirements

# Attachment 5: Draft FEED Contract Terms and Conditions

## Contract Type

- Lump-sum FEED contract
- No adjustment except agreed variations

## Contractor Obligations

Contractor shall:

- Perform FEED with due professional care
- Provide competent personnel
- Maintain quality systems
- Deliver all FEED documents complete and on time
- Coordinate with North Atlantic's FEED oversight team
- Maintain confidentiality and data protection

## North Atlantic Obligations

North Atlantic shall:

- Provide input data, site information
- Review submissions in 10 working days
- Pay invoices per payment schedule
- Provide timely clarifications

## Schedule & Deliverables

- Contractor shall meet the FEED schedule
- Delays attributable to Contractor may trigger LDs (liquidated damages)
- Deliverables as per Attachment 2

## Payment Terms

- Milestone-based
- Invoices payable net 30 days
- Retainage: 5% until FEED acceptance

## Variations

- Any change to the FEED scope requires written North Atlantic approval
- Variation orders must include:

- Change description
- Cost and schedule effect
- Revised deliverables

## Intellectual Property

- Contractor retains IP in proprietary technology
- North Atlantic owns all FEED deliverables
- North Atlantic granted perpetual right to use FEED outputs

## Confidentiality

- Both parties must protect confidential data
- No distribution without permission

## Liability & Insurance

- Contractor liable for errors/omissions up to 100% of FEED contract value
- Mandatory insurance:
  - Professional liability
  - Employer liability
  - General liability

## Termination

North Atlantic may terminate:

- For convenience (with compensation)
- For cause (non-performance)

Contractor may terminate only for North Atlantic material breach.

## Governing Law & Disputes

- Governing law: Specified by North Atlantic
- Dispute resolution:
  - Negotiation
  - Senior management meeting
  - Arbitration (ICC or UNCITRAL recommended)

## HSSE Requirements

Contractor must comply with:

- All HSSE rules
- Safety training for any site visits
- No work permitted without approved HSSE plan

## Code of Ethics

Contractor must maintain:

- Anti-corruption compliance
- Anti-bribery compliance
- Conflict of interest disclosure

Breaches may result in termination.

# Attachment 6: Health, Safety, Environment and Quality (HSEQ) Questionnaire

# Health, Safety, Environment and Quality (HSEQ) Questionnaire

**Please complete the relevant sections. If a question is not applicable to the scope of work, please mark "NA".**

## Company Information

| | |
|---|---|
| **Company Name** | |
| **Address** | |
| **Contact Name** | **Title** |
| **Telephone** | **E-mail** |
| **Number of Employees** | |

*Please list or attach any additional information you feel is relevant in demonstrating Health, Safety, Environment and Quality Management*

## Quality Management

| | |
|---|---|
| Have you implemented a Quality Management System? | ☐ Yes ☐ No |
| Is your company registered to ISO 9001 or other recognized standard? *Please provide a copy of certificate(s).* | ☐ Yes ☐ No |
| If "No", is your system compliant to ISO 9001 requirements? | ☐ Yes ☐ No |

If you do not have a Quality Management System, what processes and practices do you have in place to ensure that you are capable of meeting contractual requirements, including those relating to product or service quality.

What is your process for management of changes?

How do you identify problems that have the potential to affect your customer deliverables?

Please provide a copy of your Quality Policy, if available

## Health, Safety & Environmental Management

| | |
|---|---|
| Have you implemented an Occupational Health & Safety Management System? | ☐ Yes ☐ No |
| Have you implemented an Environmental Management System? | ☐ Yes ☐ No |

To which standards and regulatory requirements does your system comply (e.g. ISO 45001, PRIME, COR, ISO 14001, etc.) *Please provide a copy of certificate(s) if relevant.*

North Atlantic

# Health, Safety, Environment and Quality (HSEQ) Questionnaire

Please provide a copy of:

- Health and Safety Policy
- Environmental Management Policy
- Drug and Alcohol Policy

Will your employees or subcontractors be visiting North Atlantic worksites or the worksite of North Atlantic's customers? If "Yes" please provide copies of: ☐ Yes ☐ No

- Certificate of Insurance
- Workplace NL Letter of Clearance
- Applicable training certificates

Does your company have a competency assurance and training program in place to ensure that personnel are qualified and competent to perform their work safely? ☐ Yes ☐ No

Does your company have a maintenance program to ensure that equipment is safe and fit for purpose? *Please provide details.* ☐ Yes ☐ No

How are health, safety and environmental risks and controls identified, controlled and communicated. *Please provide details of procedures and processes.*

Does your company identify potential environmental impacts associated with your work and operations? *Please provide details.* ☐ Yes ☐ No

Does your company have processes in place to ensure the protection and security of products, premises and client information? *Please provide details.* ☐ Yes ☐ No

## Supplier / Contractor Statement

All of the information provided in this document and attachments is complete, true and correct. I am authorized by my company to provide this information.

| | | | |
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| **Name** | | **Title** | |
| **Email** | | **Telephone** | |
| **Signature** | | **Date** | |

*Comments:*

# Attachment 4: LOHC ISBL FEED RFP

# Dual FEED Services for LOHC Facilities

## REQUEST FOR PROPOSAL (RFP)

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| | | | | | |
| 18-Dec-2025 | 0 | Issued for Quote | J. Broders | T. Chitre | T. Chitre |
| **Date** | **Rev.** | **Status** | **Prepared By** | **Checked By** | **Approved By** |

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## Acronyms

| Acronym | Definition |
|---|---|
| BFD | Block Flow Diagram |
| BL | Battery Limits |
| BOE | Basis of Estimate |
| BoP | Balance of Plant |
| CAPEX | Capital Expenditure |
| EPC | Engineering, Procurement, Construction |
| EPF | Engineering, Procurement, Fabrication |
| ESG | Environmental, Social, Governance |
| FEED | Front End Engineering Design |
| HAZID | Hazard Identification |
| HAZOP | Hazard and Operability Study |
| HGP | Hydrogen Generation Plant |
| HSSE | Health, Safety, Security, and Environment |
| IP | Intellectual Property |
| ISBL | Inside Battery Limits |
| kTPA | Kilo Tonnes Per Annum |
| LOHC | Liquid Organic Hydrogen Carrier |
| MCH | Methylcyclohexane |
| NARC | North Atlantic Refining Corp. |
| NL | Newfoundland and Labrador |
| OSBL | Outside Battery Limits |
| PDP | Process Design Package |
| PEM | Proton Exchange Membrane |
| P&ID | Piping and Instrumentation Diagram |
| PFD | Process Flow Diagram |
| QA/QC | Quality Assurance and Quality Control |
| RFP | Request for Proposal |
| SIS | Safety Instrumentation System |

# 1 Introduction

## 1.1 Project Overview

North Atlantic Refining Corp. ("NARC" or North Atlantic) is developing an integrated wind-to-hydrogen-to-LOHC export system centred on the Come By Chance refinery site in Newfoundland and Labrador, with dehydrogenation facilities in Europe. The Project will produce low-carbon hydrogen using wind generation and associated grid interconnections, convert that hydrogen into methylcyclohexane (MCH) using toluene as a Liquid Organic Hydrogen Carrier (LOHC), and export MCH via existing marine terminal infrastructure to European receiving terminals for dehydrogenation and injection into regional hydrogen networks.


*Figure 1-1: North Atlantic Wind to Hydrogen Project Layout Come By Chance, NL*

The Project is split into four main areas:

- Wind Farm, Transmission Lines and 35 /138 KV Substation at wind side and 138/35 KV substation on Hydrogen side.

- Hydrogen Generation Plant (HGP) and 480 V Unit Sub-Substation
- Liquid Organic Hydrogen Carrier Plant – Hydrogenation at Come by Chance, NL area.
- Liquid Organic Hydrogen Carrier Plant – Dehydrogenation at user location in Europe.

The wind farm consists of approximately 45–50 utility-scale turbines, each rated about 7 MW, providing an installed capacity of roughly 320 MW for annual hydrogen production of 30 kTPA. The site includes about 60 km of access roads and a 34.5 kV collector system, designed using regional wind and topographic data. Foundations are engineered to support large-capacity tower cranes for turbine assembly and maintenance.

A 138 kV transmission line, approximately 25 km in length, connects the wind farm to HGP and Hydrogenation Plant under a behind-the-meter configuration. Supplemental grid supply from the Sunnyside substation provides additional reliability for hydrogen production and hydrogenation operations.

The HGP will comprise of modular PEM (Proton Exchange Membrane) electrolyzer units, organized into multiple arrays totaling about 240 MW of electrolysis capacity for annual hydrogen production of 30 kTPA. Each array includes several electrolyzer cabinets integrated with rectifiers, transformers, and process auxiliaries.

The LOHC plants will employ a toluene–MCH carrier system using licensed commercial technology. Existing hydrocarbon storage tanks, pipelines, and jetty facilities at the North Atlantic Terminal will be repurposed for LOHC handling. The hydrogen-laden LOHC will be shipped to a dehydrogenation facility in Wilhelmshaven, Germany, or site in Antwerp, Belgium where hydrogen will be released and injected into the European hydrogen pipeline network for final delivery to offtakes.

## 1.2 Purpose of Request for Proposal

The Owner (North Atlantic) is soliciting proposals for a Dual Front-End Engineering Design (FEED) for a new LOHC based hydrogen storage facility. This facility will consist of two primary process plants: a **hydrogenation plant** that chemically binds hydrogen to a liquid organic carrier, and a **dehydrogenation plant** that releases hydrogen from the carrier.

The purpose of this Request for Proposals (RFP) is to engage two qualified engineering contractors to perform parallel Inside Battery Limit (ISBL) Front-End Engineering Design (FEED) studies for the LOHC hydrogenation facilities at Come By Chance and the dehydrogenation facilities at [redacted] (collectively, the “Project Facilities”). Each

FEED contractor is expected to deliver a complete, end-to-end FEED package and associated cost estimate and execution plan for the full LOHC chain within the defined battery limits.

This RFP outlines the project scope, requirements, and the terms under which the proposals are solicited and provides the information necessary for bidders to prepare and submit comprehensive proposals that address the technical and commercial requirements for the FEED services.

Following completion of the parallel FEEDs, North Atlantic will evaluate the deliverables and outcomes from both contractors and intends to down-select one contractor as preferred party to support implementation, which may include Engineering, Procurement and Construction (EPC) / Engineering, Procurement and Fabrication (EPF) services, subject to performance, negotiations, and internal approvals.

Unless otherwise agreed in writing, partial proposals (e.g., hydrogenation-only or dehydrogenation-only scopes) will not be generally considered. Bidders shall assume responsibility for all scope elements described herein and in the RFP attachments. However, North Atlantic keeps its right to entertain the partial proposals for hydrogenation only or dehydrogenation only scopes if it adds value to the overall project.

All information provided in proposals shall be non-proprietary and free of any company-specific branding or references. Bidders are expected to use globally accepted standards and terminology in their submissions. Any assumptions or exceptions should be clearly stated. North Atlantic reserves the right to award contracts to two bidders, to negotiate scope and terms, or to make no award as a result of this solicitation. By participating in this RFP, bidders acknowledge and agree to abide by the terms and conditions outlined herein.

## 1.3 Scope Boundaries and External Interfaces

The wind farm, regional transmission infrastructure, grid connection, and HGP works are being developed under separate contracts and are not part of this FEED scope. The FEED contractor shall treat these facilities as external interfaces and shall adopt the design basis, operating envelopes, and interface data provided in Attachment 1 and subsequent North Atlantic communications.

Similarly, at [redacted] the LOHC process units will be hosted within existing terminal facilities. The FEED contractor shall treat host utilities, infrastructure, and marine facilities as external interfaces, and shall design the dehydrogenation

units and associated systems to integrate with those host facilities in accordance with the interface information provided by North Atlantic.

# 2 Scope of Services

The scope of work for the Dual FEED encompasses development of all activities required to deliver comprehensive front-end engineering designs for the ISBL portion of LOHC facility, covering both the hydrogenation and dehydrogenation process units and all supporting systems inside each unit. The FEED shall be developed to a level suitable for investment decision support and subsequent EPC tendering and execution.

## 2.1 Hydrogenation Unit

The bids should include two options for scope of Hydrogenation is as follows:

1. Initially sized for an annual hydrogenation capacity of 30 kTPA hydrogen; and is fully future-proofed and plot-protected to enable a subsequent expansion to 60 kTPA within the same overall plot and battery limits, through defined pre-investments (e.g., oversized foundations and pipe racks, space reservations, tie-in points, and oversizing of selected equipment where technically and economically justified).

   Thus, the contractor shall provide:

   - A fully defined 30 kTPA FEED case, including process design, equipment specifications, layouts, utility loads, HSSE studies and a Class 3 cost estimate; and
   - A corresponding 60 kTPA FEED / CAPEX case, clearly identifying incremental scope, equipment, construction works and costs required to expand from 30 kTPA to 60 kTPA.
2. Second option shall be for the total annual production capacity of 60 kTPA case including process design, equipment specifications, layouts, utility loads, Health, Safety, Security, and Environment (HSSE) studies and a Class 3 cost estimate

The location for both the options is Come-By-Chance, NL, Canada adjacent to existing Braya Refinery and corresponding North Atlantic Terminal.

North Atlantic will try and eliminate one of the options during the bidding phase and only one option will be selected for performing the FEED.

## 2.2 Dehydrogenation Unit

The FEED contractor shall develop two options for Dehydrogenation as follows:

- Process Design Package for 30 kTPA capacity at [redacted] location.
- Process Design package for 60 kTPA capacity at [redacted] location.

The contractor shall include process design basis, functional descriptions, standard design data and proprietary equipment specifications as a minimum in Process Design Package ("PDP") for each facility. Contractor shall also provide a plan to quickly move from PDP to FEED development so that overall project schedule can be maintained. **Only one of the two options will be progressed further into FEED development.**

Each selected FEED contractor will be responsible for performing, at a minimum, the following scope elements for the FEED package:

- **Process Design:** Develop the process design for the hydrogenation and dehydrogenation units using the bidder's proprietary LOHC technology. This includes establishing the design basis (feedstock and product specifications, capacities, conversion rates), preparing process flow diagrams (PFDs), heat and material balances, and detailed process descriptions for how hydrogen will be absorbed and released by the LOHC.
    - **Equipment and Facilities Engineering:** Perform preliminary design and specification of all major equipment and systems. This covers reactors, heat exchangers, distillation columns, drums, vessels, pumps, compressors and any specialty equipment, hydrogen and toluene purification systems, and any other critical equipment in both units. Contractors shall size and specify equipment based on their technology, and provide general arrangement drawings, equipment datasheets, and layouts for the process units.
        - **Integration and Utilities:** Design the integration of hydrogenation and dehydrogenation units with common facilities available at respective sites. This includes all required utility systems (electric power, cooling, heating, inert gas, etc.), controls and instrumentation, safety systems (fire and gas detection, emergency shutdown systems), and any required infrastructure (such as storage

for hydrogen-rich and hydrogen-lean carrier, loading/unloading facilities as applicable). The FEED shall ensure that the two process units are properly interfaced and that the overall facility operates safely and efficiently as a single system at each location.

- **Safety, Health, and Environment:** Incorporate best-practice safety and environmental design principles. Conduct preliminary hazard identification and operability studies (HAZID/HAZOP) during the FEED to ensure the design meets all safety requirements. Consider environmental controls for emissions, effluents, and waste associated with the LOHC processes (for example, any vented gases or spent catalysts) in compliance with relevant regulations and standards.
- **Project Deliverables Preparation:** Prepare all required FEED deliverables (as detailed in Section 4) including engineering documents, drawings, specifications, and reports. The FEED packages developed by each contractor should be sufficient in detail and quality to enable North Atlantic to confidently assess the feasibility, obtain accurate cost estimates, and proceed to EPF roll over or EPC bidding and execution after FEED.
- **Coordination and Reviews:** Coordinate with North Atlantic's project team for data exchange, design reviews, and interface management. The contractors will participate in periodic progress reviews and a final FEED review with North Atlantic. Each contractor is expected to proactively identify any scope ambiguities or required project decisions and engage with North Atlantic to resolve them during the FEED phase.
- **Schedule and Reporting:** Develop and adhere to a FEED schedule that meets North Atlantic's overall project timeline objectives. Provide regular progress reports to the North Atlantic, highlighting accomplishments, upcoming work, and any issues or risks that need attention. Maintain quality management throughout the FEED in line with the contractor's QA/QC procedures and North Atlantic's expectations.

Each FEED contractor's scope for FEED phase concludes with the handover of a complete FEED package and associated documentation as per Section 4 (Technical Deliverables). North Atlantic expects that the scope will be executed in accordance with international engineering standards and that the deliverables will reflect a high-quality, thoroughly vetted design ready for advancement to the implementation stage.

## 2.3 ISBL Scope Definition

In order to maintain consistency between the bidders, a general definition of scope for ISBL FEED Contractor is provided below with the basic assumption that ISBL FEED contractor will assume all the above ground ISBL scope and provide required interface information to Balance of Plant (BoP) and Outside Battery Limit (OSBL) FEED contractor:

- Process units and piping within unit battery limits
- Unit utility systems
- In-unit LOHC storage (if applicable)
- ISBL relief and vent systems, above ground drains to battery limits (BLs) or up to underground tie-in points. Flare system is outside the scope.
- All electrical / instrumentation and control systems up to junction boxes, MCCs or substations as applicable.

See Figure 2-1 and 2-2 for high level Block Flow Diagrams (BFD) outlining the RFP boundaries for both the Come By Chance and European Facilities.

Contractors shall produce an Interface Register covering all external interfaces (wind farm, grid, terminals, marine loading, hydrogen network) for piping, electrical, instrumentation and civil engineering.

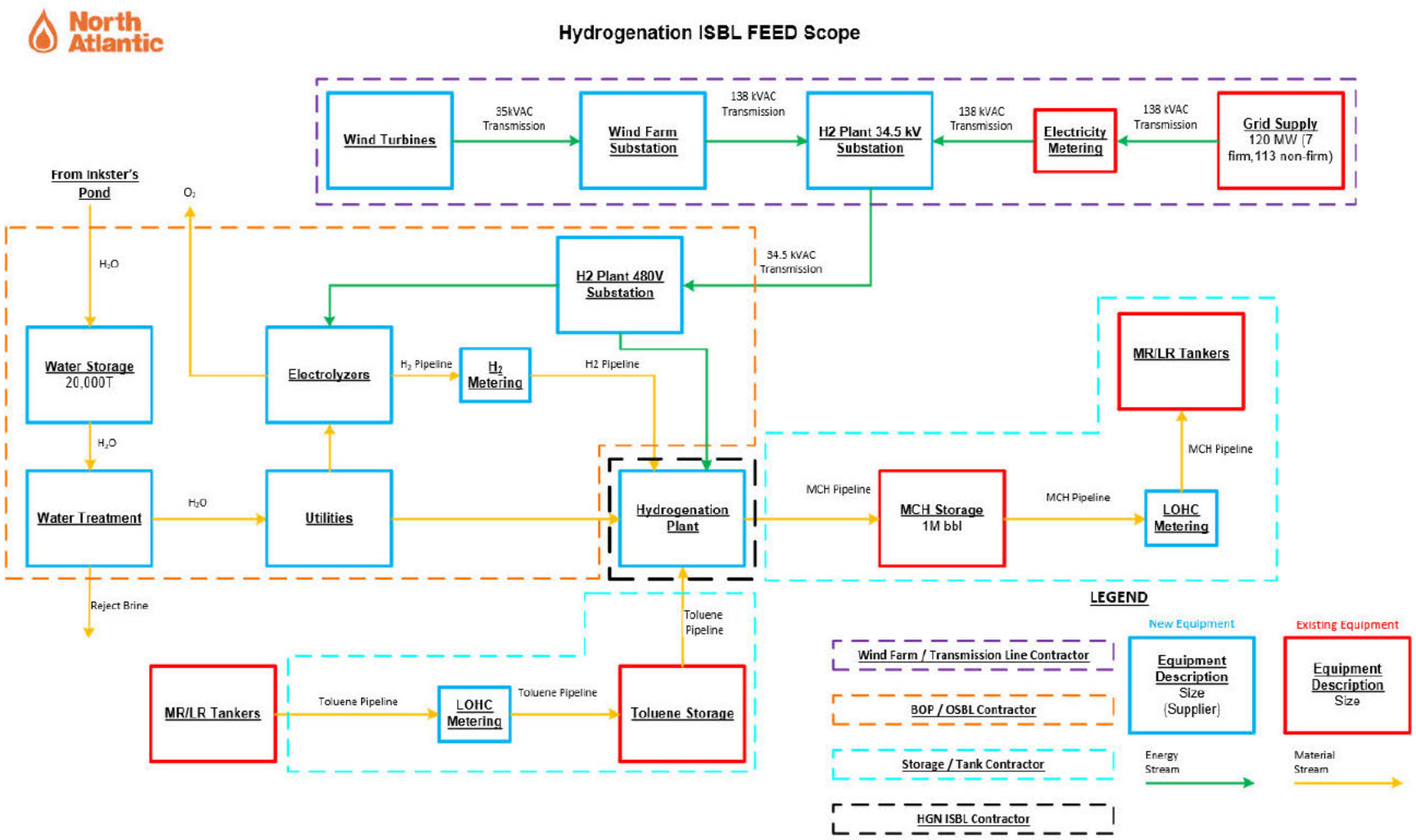


*Figure 2-1: Hydrogenation ISBL FEED Scope BFD (Come By Chance)*

## Dehydrogenation ISBL FEED Scope

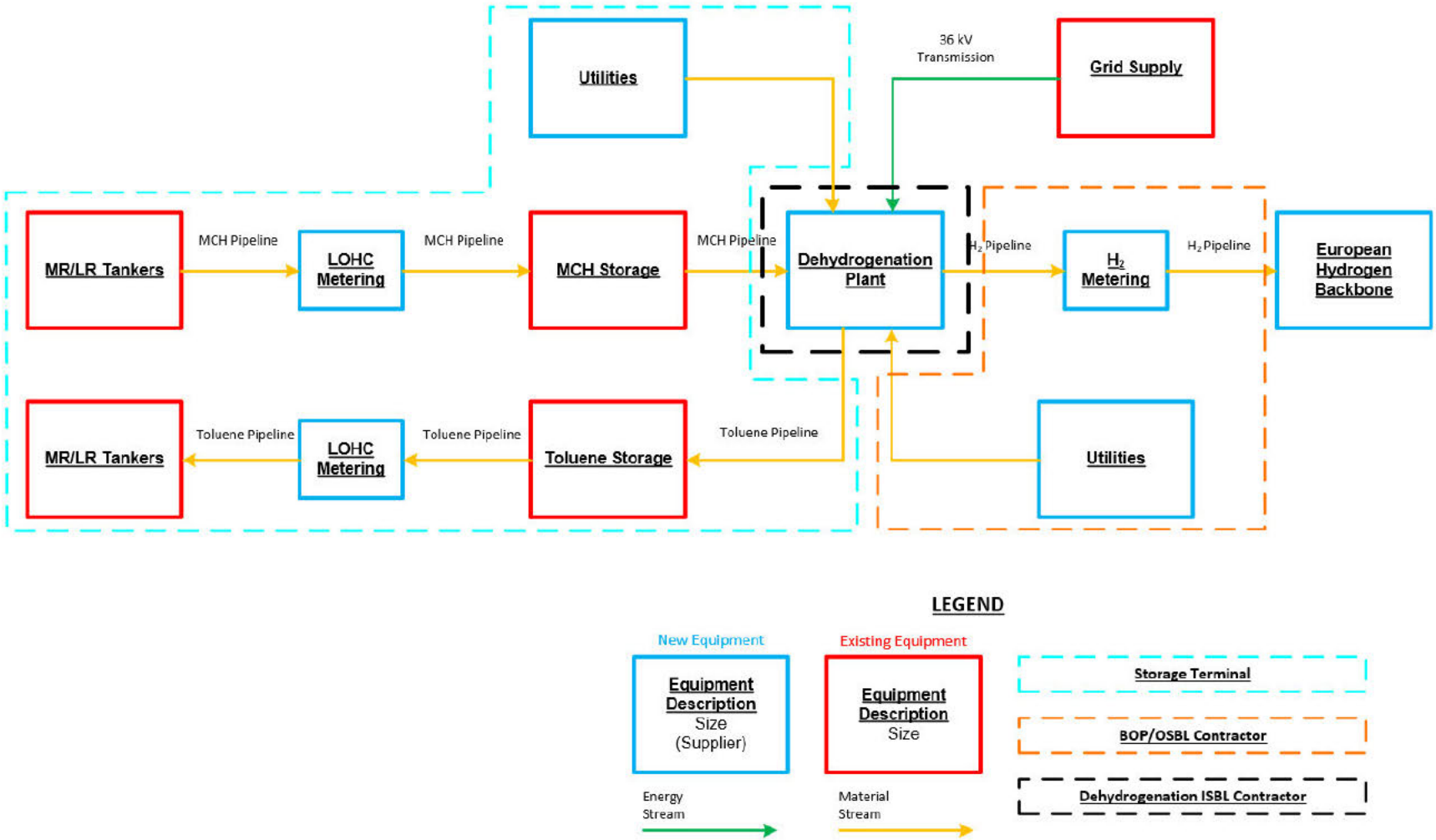


*Figure 2-2: Dehydrogenation ISBL FEED Scope BFD (Europe)*

## 2.4 Permitting and Environmental Support

North Atlantic will lead permitting process; however, the FEED contractor shall provide technical inputs including but not limited to:

- Emissions inventories
- Technical process descriptions
- Plot plans and key drawings
- Environmental and safety study inputs

# 3 Proposal Submission Requirements

Bidders shall prepare a clear and comprehensive proposal in response to this RFP. The proposal must be organized into two parts – a Technical Proposal and a Commercial Proposal – and should address all requirements outlined below. All proposals must be written in English with a professional and concise style, free of marketing fluff and extraneous information.

## 3.1 Technical Proposal

The Technical Proposal should detail the bidder's approach, capability, and technical solution for executing the FEED. It should include:

- **Introduction and Understanding:** A brief executive summary of the proposal, outlining the bidder's understanding of the project and the RFP objectives. Highlight any unique aspects of the proposed approach or technology.
- **Bidder Experience and Qualifications:** An overview of the bidder's relevant experience, particularly in LOHC technology or similar hydrogen-related projects. Include a summary of past projects or case studies (without referencing specific client names or locations) that demonstrate the bidder's capability to deliver FEED and subsequent project phases in EPF modular concept for comparable process facilities. Emphasize any successful hydrogenation/dehydrogenation plant designs or hydrogen infrastructure projects completed by the bidder. Also, contractor shall include an organization chart showing execution model with resource allocation and CVs of key project personnel.
- **Technology Description:** A description of the LOHC technology the bidder will utilize. Explain the chemistry and process for hydrogenation and dehydrogenation, the carrier medium involved (without using proprietary trade names if possible), and the performance characteristics (e.g. hydrogen storage capacity per cycle, expected efficiency, operating

conditions like temperature/pressure). Confirm the technology's readiness level and any industrial references (again, without disclosing proprietary names).

- **Scope Execution Plan:** A detailed plan for how the bidder will execute the FEED scope of work. This should include the proposed project organization and team structure (identifying key personnel and their roles/qualifications), the design methodology, and how the bidder will manage interface between hydrogenation and dehydrogenation design, as well as interface with North Atlantic. Provide a preliminary project schedule for the FEED activities, showing key milestones, deliverables, and reviews. Describe type of digital tools or software and data environment to be used (e.g. process simulation software, P&ID drafting, 3D modeling, etc.).
- **Deliverables and Quality Assurance:** Confirm understanding of the required FEED deliverables (Section 4) and describe the bidder's internal quality assurance process to ensure deliverables are completed to a high standard. If the bidder has standard deliverable lists or templates, the proposal may reference them (to be provided in the appendix of the proposal if needed). Discuss how the bidder will incorporate safety and regulatory compliance in the design process.
- **Risk Management:** Identify any major risks or challenges foreseen in this FEED or the subsequent project execution (for example, scale-up of new technology, supply chain for key equipment, etc.) and describe strategies to mitigate them. Explain how the bidder's dual FEED involvement will be managed to protect the confidentiality of its proposal and design vis-à-vis any parallel competitor efforts (North Atlantic will also manage information separation).
- **Interface Management**: Each contractor will develop a framework for an interface management plan to interchange required project data between various other FEED contractors on timely basis and create various interface tables such as battery limit tables, civil loads, utility summaries, electrical loads, emissions summary and relief load summary necessary to maintain the overall project schedule.

  The plan shall also contain the interface or coordination with the owner team on regular basis as well as request for information required from North Atlantic to carry out FEED scope.

- **Execution to EPC Transition:** Although the RFP is for FEED services, briefly describe how the bidder envisions the transition from FEED to EPF phase. Outline any continuity

plan or advantages the bidder's organization offers for moving into the EPF phase (such as having module construction management capability, established procurement networks for equipment, etc.). This section helps demonstrate the bidder's ability to support the project beyond FEED.

- **Assumptions, Clarifications and Deviations** – Contractor shall provide complete list of all the Assumptions, Clarifications, and Deviations to the RFP explaining the reasons with any benefits to the project.

The Technical Proposal should be structured and paginated clearly, with a table of contents and section headings corresponding to the points above. All pages should be numbered. Any confidential or proprietary content in the proposal should be minimized and, if necessary, clearly marked.

## 3.2 Commercial Proposal

The Commercial Proposal must contain all relevant financial and commercial information. It should include:

- **FEED Pricing:** A lump-sum price (or other agreed pricing structure, if requested by North Atlantic for execution of the complete FEED scope of work as defined in this RFP. The price should be inclusive of all labor, subcontracts, licenses, software, travel, overheads, and profit. Provide a breakdown of the lump sum price into major categories (e.g. engineering man-hours/costs, specialist sub-consultants, studies, etc.) for transparency. Proposal shall clearly mention the main execution center and offshore or high value center cost breakdown and manhour costs. Refer to Form C-2 in Attachment 3 for indicative rate schedule.

  Contractor shall include the pricing in a specified currency (e.g. USD is preferred) and whether it is subject to any exchange rate conditions or inflation adjustments if the FEED extends over a certain time along with all the tax considerations. Contractor shall also specify foreign exchange assumptions for EUR exposed costs.

- **Payment Schedule:** A proposed milestone payment schedule or invoicing plan for the FEED. Payments may be tied to key deliverables or progress milestones (e.g. % completion of FEED, draft deliverables, final deliverables).
- **Commercial Terms and Exceptions:** A clear statement of compliance with the RFP's commercial and contractual terms (Section 7). The bidder should explicitly confirm

acceptance of the draft contract terms provided in the attachments or enumerate any exceptions or deviations they propose. Any exceptions to terms will be considered in the evaluation and may affect the bidder's standing.

- **Technology Licensing and Royalties:** If the bidder's proposal involves any proprietary technology licenses, catalysts, or patented equipment for the LOHC process, the Commercial Proposal should outline the intended licensing terms or fees. This includes any one-time license fee for the technology usage, royalties per unit of hydrogen throughput (if applicable), or costs of proprietary catalyst supply for initial fill and subsequent operations. These costs can be presented as part of the FEED proposal or as separate information but must be clearly disclosed for North Atlantic's consideration.
- **Future EPC Phase Commitments:** While not required at this RFP stage, the bidder may provide any indicative proposal or commitments for the EPC phase to demonstrate the competitiveness of their overall offering. For example, the bidder can indicate their openness to a lump-sum EPF contract or other execution models, provide a level 4 EPF cost estimate based on current knowledge, or propose performance guarantees for the plant. Such information, if provided, will be treated as indicative and used to understand the bidder's full project capability.
- **Validity and Schedule:** State the validity period of the proposal (which should be sufficient to cover the RFP evaluation and award period, e.g. 90-120 days). Also confirm the bidder's availability to commence work immediately upon award and any assumptions on schedule (for instance, a FEED duration of X weeks from award to completion). All Commercial Proposals must be submitted separately from Technical Proposals (e.g. in a separate file or sealed envelope if physically delivered) to ensure objective evaluation. No pricing information should appear in the Technical Proposal. Proposals should be submitted by the deadline specified by North Atlantic, in the manner (electronic portal/email) indicated. Late submissions or submissions that do not follow the requirements may be disqualified. Each bidder is responsible for ensuring their proposal is complete and compliant with all requirements of this RFP.

# 4 Technical Deliverables (FEED Outputs)

By the conclusion of the FEED phase, each selected contractor shall produce a comprehensive set of technical deliverables. These deliverables will form the basis for the project's investment decision and the input to the EPC phase. The required FEED deliverables include, but are not limited to, the following:

- **Design Basis Memorandum:** A complete Basis of Design document covering all key design criteria for the project. This includes feed and product specifications (purity, pressure, temperature of hydrogen and LOHC at battery limits), design capacity (throughput of hydrogen to be stored/released per day or year), site conditions (environmental data, utilities available, design ambient conditions), and any specific client requirements or standards to be adhered to. This document will be the reference for all subsequent design work.
- **Process Flow Diagrams (PFDs):** Diagrams for the hydrogenation and dehydrogenation processes, showing all major equipment and process streams. Accompanied by corresponding detailed heat and material balance sheets for each major operating case (e.g. normal operation, turndown, startup/shutdown as relevant).
- **Piping and Instrumentation Diagrams (P&IDs):** Issued for Design P&IDs for all process and utility systems in the scope accompanied by line lists. These should illustrate equipment items, piping, instrumentation, control loops, safety valves, and interlocks. Each FEED package should have complete P&IDs that will later be refined in detailed design.
- **Equipment Datasheets and Specifications:** Issued for Design datasheets for all significant equipment, including reactors (hydrogenation reactor, dehydrogenation reactor), pumps, compressors, heat exchangers, pressure vessels, storage tanks, fired heaters, and filtration or purification units. Each datasheet should specify design and operating parameters, materials of construction, design codes, and utility requirements. Vendor quotes or budgetary pricing for key equipment should be obtained during FEED to support the cost estimate.
- **General Arrangement and Plot Plan:** Drawings showing the proposed layout of the facility, including equipment footprints, elevations, and routing of major piping runs. The plot plan should illustrate the optimized arrangement of the hydrogenation unit, dehydrogenation unit, storage areas for LOHC (if required), hydrogen storage (if any), flare system (if required), control room, substation, and any other ancillary facilities. Ensure that layout considerations include safety spacing, access for maintenance, and future expansion if relevant.

  Contractor shall develop FEED level 3D model (typically 30% stage) for layout, safety spacing, access, maintenance space such as exchanger bundle pulling, modularization and clash review, etc.

- **Instrumentation and Control Philosophy:** A narrative or document describing the overall control strategy for the facility, including how the two process units will be monitored and controlled. Identify the proposed automation system platform (DCS/PLC) and any advanced control or safety instrumented systems (SIS) intended. Include an alarm and safeguarding philosophy, and basic cause & effect matrices for critical shutdowns along with preliminary description (to be detailed in EPC phase).
- **Electrical and Utilities Design:** Key one-line diagrams for power distribution showing how major electrical loads (compressors, pumps, etc.) will be fed. Include load lists for electrical power and summaries of other utility consumption (water, steam, fuel gas, etc.). Specify any new utility systems or utility upgrades needed. If the project requires a power supply arrangement or backup generators, include conceptual designs for those.
- **Utility and Chemicals Summaries:** Detailed requirements of utilities and chemicals during start-up, shutdown and normal operations for ISBL facility to support the design of BoP FEED contractor.
- **Emission and Effluent Summary:** Detailed estimate of continuous and intermittent plant emissions, liquid and solid effluents.
- **Relief Load Summary:** Estimate of relief load from each of the ISBL units including preliminary datasheets of relief valves. The summary should describe various relief scenarios considered for the design.
- **Safety Studies and HSE Plan:** Documentation of the HAZOP study findings and recommendations conducted during FEED (or plan for it if scheduled late in FEED). A preliminary hazard analysis and risk assessment report covering major accident scenarios (e.g. hydrogen leaks, fires, etc.) and how the design mitigates them. Additionally, an outline of the environmental management plan, noting any emissions or effluents expected and design provisions to minimize environmental impact. Ensure compliance with all relevant safety standards (such as process safety requirements, hazardous area classification for electrical design, etc.).
- **Project Execution Plan (FEED Phase and Beyond):** A document detailing how the project can be executed in the next phases, building on the FEED results. This includes a proposed contracting strategy (if the FEED contractor were to carry on, or the strategy if it goes to market), module construction plan overview, module construction sequencing, and commissioning/startup plan at a high level. While much of execution planning will be refined post-FEED, the FEED contractor should highlight any important execution

considerations discovered during FEED (for example, any unique construction requirements for the chosen technology).

- **Project Schedule:** An updated level 3 project schedule covering the FEED work (as executed) and a proposed timeline for detailed engineering, procurement, module construction, and commissioning. This schedule should validate that the project can be delivered within the timeframe expected by North Atlantic. Key milestones (like long-lead equipment orders, permitting, etc.) should be identified.
- **Cost Estimate:** (See Section 5 for details) A detailed cost estimate for the capital project, developed to a Class 3 accuracy or better. This should include a breakdown of costs by discipline or by plant area (hydrogenation unit, dehydrogenation unit, utilities, offsites, etc.), including direct costs (equipment, bulk materials, construction labor) and indirect costs (engineering, procurement, construction management, contingencies). The estimate must be accompanied by an explanatory basis of estimate document listing the assumptions, exclusions, sources of cost data (vendor quotes, factors, benchmarks), applied contingency and its rationale, and an estimate of accuracy range.
- **Interface Register** – A Battery Limit interface tables covering all the technical interface boundaries between ISBL and OSBL areas.
- **Others:** Any additional documents and /or deliverables that are necessary to support cost estimate and for a complete FEED package, such as:
    - Line lists, valve lists, instrument indexes.
    - Preliminary piping layouts or isometrics for critical lines (if any high-risk or long-lead piping items).
    - Material selection diagrams or corrosion study results for handling hydrogen and LOHC chemicals.
    - A 3D model review summary or screenshots, to demonstrate design completeness and allow North Atlantic to visualize the facility.
    - Commissioning and Decommissioning considerations for the LOHC (like how initial fill and regeneration cycles will be handled).

All deliverables should be provided in both native format (e.g., CAD drawings, Excel datasheets or software used) and compiled format (PDF files for documents and drawings). The FEED contractors shall ensure that the deliverables are sufficiently detailed and meet industry standards so that the next phase engineering teams (whether the same contractor or others) can seamlessly take the design forward.

At the end of FEED phase, contractor shall handover all the FEED deliverables data including tag register, equipment list, line list, instrument index, I/O list in machine-readable formats.

# 5 Cost Estimation

A critical outcome of the FEED phase is a robust cost estimate for the LOHC facility project. Each FEED contractor is required to develop and provide a comprehensive cost estimation as part of their deliverables (referenced in Section 4). The expectations for the cost estimate are as follows:

- **Accuracy and Classification:** The cost estimate should be developed to an expected accuracy of approximately -10/+15% (typically corresponding to a Class 3 estimate as defined by AACE International or similar industry classification). The estimate should reflect the level of definition achieved during FEED and be suitable for budget authorization and investment decisions.
- **Scope Coverage:** The estimate must cover the entire scope of the project as defined in FEED, including the hydrogenation plant, dehydrogenation plant, associated utility systems and any other project components inside battery limit area (ISBL). It should also include costs for site preparation, transportation, and installation, as applicable. Contractor shall provide cost estimate for both the units separately and then provide combined cost estimate showing benefits achieved, if any due to integration of the design development and module construction.
- **Cost Breakdown:** Provide a structured breakdown of the total installed cost. This breakdown may be organized by:
- **Discipline:** e.g., civil/structural, mechanical, piping, electrical, instrumentation, etc.
- **Facility Area:** e.g., hydrogenation unit, and dehydrogenation unit.
- **Cost Categories:** e.g., equipment, bulk materials, labor, engineering, construction management, contingency, etc. The breakdown should be detailed enough to facilitate analysis and understanding of cost drivers.
- **Basis of Estimate:** Accompany the numerical estimate with a Basis of Estimate (BOE) document as follows:
    - Base currency (USD / CAD) for all costs.
    - Base date clearly stated.
    - FX assumptions for EUR-denominated costs.
    - Sensitivity analysis for FX variations.
    - Clear statements regarding duties, customs and indirect taxes.

- Explicit listing of exclusions, owner-furnished items and assumptions.

The BOE should clearly state all assumptions and inclusions, such as: design basis for costing (capacity, design conditions), source of pricing data (vendor quotes for major equipment, cost databases for bulk materials and labor unit rates, etc.), assumed labor productivity and working hours, any location factors or adjustments used (without naming specific countries, just general conditions), contingency philosophy, and escalation if assumed. Note any costs excluded (e.g., land acquisition, certain owner costs like licensing fees if not included, etc.) and any specific risk allowances.

- **Operational Costs Estimate:** In addition to CAPEX, provide an estimate or analysis of expected operational costs (OPEX) for the facility. This includes estimated utilities consumption (and costs), catalyst or chemical consumption (e.g. periodic replacement of LOHC or catalyst if applicable), manpower requirements for operation, maintenance costs, etc. This information will help in evaluating the life-cycle cost effectiveness of the proposed technology.
- **Validation and Benchmarking:** The contractor should perform basic validation on the estimate, such as benchmarking key metrics (e.g., cost per ton of hydrogen storage capacity, or per kW of throughput) against industry data or similar projects (if available). All such comparisons should be presented in generic terms without reference to specific projects. Identify any areas of significant cost uncertainty or potential opportunities for cost optimization that were observed during FEED.
- **Review and Iteration:** The cost estimate should undergo the contractor's internal review process (with cross-discipline input) to ensure completeness. The final estimate will be reviewed with North Atlantic as part of the FEED completion, and contractors should be prepared to discuss and justify the estimate details. North Atlantic may engage an independent reviewer to audit the estimates from both FEED contractors for fairness and accuracy.

The cost estimation deliverable will play a significant role in the final selection of the implementation contractor. Bidders are thus expected to put forward their best effort in providing a reliable and well-documented estimate. North Atlantic emphasizes transparency in the estimate; any use of allowances or factors should be clearly explained. The currency for all cost reporting shall be [specified currency, e.g., USD], and costs should be based on price levels of 2026. No

inflation escalation should be included beyond this point for comparison purposes, unless specifically requested by North Atlantic.

# 6 Execution Approach

This section describes the intended project execution strategy and how the dual FEED process will be managed by North Atlantic. Bidders should read this carefully, as it sets the context for how their work will feed into the larger project timeline and decision-making process.

North Atlantic's current intent is to select one FEED contractor as preferred EPC / EPF contractor following dual FEED completion, subject to performance and commercial agreement. North Atlantic reserves the right to tender EPC separately if in its best interest.

- **Dual FEED Competition Structure:** North Atlantic plans to award FEED contracts to two separate contractors (as a result of this RFP) to pursue parallel FEED studies. Both contractors will work over the same timeframe, starting concurrently, to develop their respective designs and deliverables independently. Each contractor will utilize its own technology and expertise for the LOHC hydrogenation and dehydrogenation processes. North Atlantic will ensure a fair and confidential competitive environment; no exchange of proprietary information will occur between the two FEED contractors. Periodic progress meetings may be held, but they will be separate for each contractor to protect competitive data.
- **FEED Timeline and Coordination:** The expected duration of the FEED phase is approximately 6 months or better from kick-off to final deliverables. During this period, North Atlantic will assign a dedicated owner's team to interface with each FEED contractor. Regular coordination meetings (e.g., weekly progress calls and monthly formal reviews) will be conducted to monitor progress, clarify any questions, and ensure alignment with project objectives. Key milestones during FEED may include Kick-off Meeting, Design Basis Freeze, Mid-way Design Reviews (PFD, P&IDs, Single Line Diagrams, etc.), HAZOP completion, 3D Model Review (as applicable), Draft Deliverables Submission, and Final FEED Completion Review.
- **Interim Deliverables and Reports**: Each FEED contractor will be expected to submit interim deliverables or summary reports at defined milestones (for instance, a 30% design review package or a preliminary cost report mid-way through FEED). This allows North Atlantic to track whether the designs are evolving in a direction that meets the project requirements. Feedback from North Atlantic at these stages will be provided separately to

each contractor, focusing on clarifications or requested adjustments, without revealing any competitive information.

- **Evaluation and Down-Selection:** Upon FEED completion, both contractors will have delivered their FEED packages including technical designs, cost estimates, and execution plans. North Atlantic will then conduct a thorough evaluation of the outcomes. Criteria will include technical viability, cost-effectiveness, execution risk, and alignment with the north Atlantic's strategic goals (the same general areas outlined in Section 8 for proposal evaluation will also guide the FEED outcome evaluation). North Atlantic's intent is to select one of the FEED contractors to proceed to the next phase of the project, which could be a direct award of an EPF contract or a separate tender for EPC where the FEED contractors may have an advantage.
- **Post-FEED Implementation:** The contractor selected to continue will likely enter into negotiations for an EPF (or EPC) contract to execute the project, using their FEED as the basis. At that stage, any remaining design optimization, detailed engineering, procurement, and module construction will be carried out. The FEED contractor not selected will be compensated as per the terms of the FEED contract for the scope delivered but will not proceed to execution. North Atlantic may consider an honorarium or partial compensation for the unsuccessful FEED contractor's efforts (if such terms are defined in the contract) to acknowledge their participation and the value of their work.
- **Technology and Intellectual Property:** During execution, any proprietary technology information provided by either FEED contractor will remain confidential. North Atlantic will ensure that intellectual property rights are respected: the selected design will be used solely for North Atlantic's project implementation. North Atlantic will not share or use the losing contractor's detailed design for execution, beyond extracting any general lessons or data that are not proprietary. Bidders should be assured that the dual FEED approach is intended to select the best solution, not to mix designs or divulge trade secrets.
- **Future Collaboration:** North Atlantic encourages both FEED contractors to maintain a collaborative stance with North Atlantic throughout the FEED. In case the project scope is expanded or if future similar projects arise, there may be opportunities for both contractors beyond this specific competition. Thus, even though this is a competitive FEED, maintaining professionalism and quality throughout is in the long-term interest of all parties.

The above approach is provided to ensure transparency on how the dual FEED will be executed. Bidders should align their proposals and internal planning to this execution strategy. Any concerns or suggestions regarding the execution approach can be addressed during the RFP clarification period prior to the proposal submission deadline.

# 7 Commercial Terms

This section summarizes key commercial and contractual terms that will govern the FEED contracts and highlights important conditions for this RFP. Bidders must carefully review these terms and ensure their Commercial Proposals are compliant or note any exceptions explicitly.

- **Contract Structure:** The contract awarded for the FEED services to each selected bidder will be a standalone agreement based on a bidder's standard FEED contract format. It is anticipated to be a fixed-price (lump sum) contract for the defined FEED scope. Bidders should account for all costs in their lump sum price, as no additional compensation will be provided for completing the scope aside from agreed variations.
- **Payment Terms:** Payments for FEED services will be made against milestones or progress as outlined in the contract. Bidders may propose a milestone payment schedule in their Commercial Proposal, which will be subject to negotiation. Typically, a portion of the payment is tied to contract award/kickoff (mobilization), with subsequent payments upon intermediate deliverables and a final payment upon acceptance of all FEED deliverables. North Atlantic may retain a small percentage of each payment (retainage) until final completion as a performance security.
- **Confidentiality and Data Use:** All data provided by North Atlantic to bidders (including in this RFP and attachments) and all data developed by contractors during FEED must be kept confidential and used solely for the purposes of this project. The FEED contract will include confidentiality provisions binding the contractor. Similarly, North Atlantic will treat the bidders' proprietary technical information confidentially. Both FEED contractors will be required to operate independently and not disclose any information to each other.
- **Intellectual Property Rights:** Any intellectual property (IP) or proprietary technology brought by the contractor for the purpose of the project remains the property of the contractor or technology provider. However, all FEED work products (documents, models, drawings, calculations) developed under the FEED contract will become the property of North Atlantic upon payment. North Atlantic will receive an unrestricted right to use the FEED deliverables for executing the project. If licenses are required for the technology to

build or operate the facility, the commercial terms of such licenses should be identified in the proposal and will be included in the contract negotiations.

- **Liabilities and Warranties:** The FEED contract will define the liability of the contractor for its work. Bidders shall state their standard liability positions, and professional indemnity limits/duration. Typically, the contractor will be liable for the consequences of errors or omissions in the FEED deliverables. Bidders should carry professional indemnity insurance and provide proof of such insurance if requested. The FEED contract may also include warranties that the work is performed in a professional manner and that the deliverables will meet the specified requirements. Any performance guarantees for the technology (e.g. efficiency, capacity) will primarily be formalized in the subsequent EPC phase, but bidders should stand behind the technical viability of their FEED designs.
- **Governing Law and Arbitration:** The contract and all matters arising in connection herewith, including validity and enforcement, will be governed by, interpreted and construed in accordance with the laws of the Province of Newfoundland and Labrador, without giving effect to any conflicts of laws principles that would result in the application of a different law. Disputes that cannot be resolved amicably will be settled by arbitration under a recognized international arbitration body or rules. Bidders shall accept the proposed governing law and dispute resolution mechanism.
- **Health, Safety, Security & Environment (HSSE):** Contractors must perform their work in compliance with all applicable HSSE laws and regulations. While most FEED work is office-based, if any site visits or field work is required during FEED, the contractor must adhere to North Atlantic's safety requirements. No alcohol, drugs, or other prohibited activities are allowed on site. The contract will include standard HSSE requirements, and the contractor shall have to provide an HSSE plan if performing any on-site activities.
- **Code of Conduct and Compliance:** Bidders and their personnel must conduct business in a responsible and ethical manner. North Atlantic expects compliance with anti-bribery, anti-corruption laws (e.g., not offering any inducements to North Atlantic employees or stakeholders), and adherence to international standards for business conduct. The contract will have clauses addressing these compliance requirements. Any conflict of interest must be disclosed. North Atlantic reserves the right to disqualify a bidder or terminate a contract if any compliance violations are discovered.
- **Reservation of Rights:** North Atlantic reserves the right to accept or reject any and all proposals, to negotiate contract terms with the selected bidders, and to award or not award the FEED contracts at its sole discretion. Issuance of this RFP and even selection of

contractors for FEED does not commit North Atlantic to proceed with the project to EPC or beyond. North Atlantic may also choose to terminate the project or the FEED contracts at any stage, subject to fair compensation for work done, if business circumstances warrant.

- **Clarifications and Amendments:** Bidders may seek clarification on the RFP by submitting questions in writing by the date specified (in the RFP schedule or instructions). North Atlantic will issue clarifications or amendments to all bidders to ensure a fair and transparent process. All such addenda become part of the RFP requirements and must be acknowledged in the proposal. Bidders are advised to regularly check for any updates before finalizing their submissions.

Bidders should review the attached draft contract and ensure that their proposals either accept the terms or flag specific exceptions. Extensive exceptions or unwillingness to adhere to standard terms may result in a proposal being considered less favorable. North Atlantic aims to establish a fair contract that protects both parties and ensures a successful partnership through FEED and potentially into project execution.

# 8 Evaluation Criteria

The selection of the two FEED contractors through this RFP will be based on a multi-criteria evaluation to determine the best overall value to North Atlantic. The proposals will be evaluated by an evaluation committee against the following criteria (not necessarily listed in order of importance, unless weightings are specified):

- **Technical Capability and Solution (Technology Merit):** Evaluation of the proposed LOHC technology and design approach. This includes the efficiency and reliability of the hydrogenation/dehydrogenation process, the maturity of the technology (proven track record vs. novel approach), and how well the proposed design can meet the specific project requirements (capacity, safety, operability w.r.t wind power without energy storage). Bidders offering a robust, proven technology with clear advantages (e.g., higher hydrogen storage density, lower energy consumption, etc.) will be rated highly.
- **Execution Plan and Schedule:** The quality and credibility of the bidder's FEED execution plan. This covers the proposed schedule (e.g. can the FEED be completed within the required timeframe?), the adequacy of the project team (skills and experience of key personnel), resource allocation, and the approach to managing the FEED work (including

interface management and risk mitigation). A realistic schedule and a well-structured plan indicating a clear path to deliverables will score well.

- **Experience and Track Record:** The bidder's experience with projects of similar nature and scale. This includes successful completion of FEED and EPF for related process plants (especially hydrogen-related or chemical process facilities). The expertise in LOHC or hydrogen technologies, and general engineering performance demonstrated in past projects, will be considered. Client references or performance on past projects (if known to North Atlantic or provided in the proposal) will also influence this criterion.
- **Commercial Offer:** The competitiveness and completeness of the Commercial Proposal. A key factor is the lump sum price for FEED services – North Atlnatic will evaluate whether it is reasonable and within budget expectations. However, the lowest price will not automatically win; price will be considered in relation to the overall value and quality offered. The proposed payment schedule, any exceptions to contract terms, and any cost-saving offers for the EPF/EPC phase (if provided) will also be taken into account.
- **Life-Cycle Considerations:** Though the immediate selection is for FEED, North Atlantic will consider the implications of each bidder's proposal on the overall project life-cycle. This includes the anticipated capital and operating costs of the final facility (from the provided technology and initial cost estimates), the ease of implementation (construction and startup considerations), and long-term operability/maintainability. A proposal that might have a higher FEED cost but leads to a significantly more economical or lower-risk project execution could be favored.
- **Compliance and Quality of Proposal:** The degree to which the bidder's proposal adheres to the RFP instructions. A well-organized, clearly written, and complete proposal that addresses all requirements is essential. Proposals that contain ambiguities, omissions, or deviations without explanation may be scored lower. The responsiveness during the RFP process (such as timely clarification questions and professional communication) will also reflect the bidder's commitment and competence.
- **Safety and ESG (Environmental, Social, Governance):** The emphasis the bidder places on safety in design and their track record for safety in engineering projects. Additionally, North Atlantic may consider the bidder's corporate commitment to sustainability and any innovative ideas to minimize the environmental footprint of the project (for instance, energy optimization in the process, use of waste heat, recyclability of the LOHC material, etc.). While these may not be primary selection criteria, a strong safety culture and alignment with North Atlantic's ESG values can distinguish a proposal.

North Atlantic may assign weighted scores to these criteria or use a qualitative ranking process.

Indicative evaluation weightings are as below:

- Technical Capability & Technology Merit – 25%
- Execution Strategy & Schedule – 20%
- Relevant Experience & Team Strength – 15%
- Commercial Offer – 30%
- HSSE & ESG Alignment – 10%

Bidders shall complete the Compliance Matrix (Attachment 3).

Bidders might be invited to an interview or clarification meeting as part of the evaluation, where they can present their proposal and address questions. Ultimately, North Atlantic will select the two proposals that are deemed most advantageous, balancing both technical excellence and cost considerations.

All bidders will be notified of the outcome of the RFP. After selection, North Atlantic may offer a debrief to unsuccessful bidders upon request, to provide feedback (in general terms) on areas for improvement. North Atlantic appreciates the effort involved in preparing these proposals and will conduct the evaluation in a fair and confidential manner.

# 9 Attachments

The following attachments are listed, and some are included with this RFP to provide additional information and templates to assist bidders in preparing their proposals. Bidders should ensure they have received all documents and should incorporate the requirements and information from these attachments into their response where applicable:

- **Attachment 1: Design Basis** – Detailed project description, design basis data, and technical requirements for the LOHC facility. This document includes specifics such as hydrogen supply details, required hydrogen output specifications, preliminary site information, environmental conditions, and any predefined design standards or codes to be followed.
- **Attachment 2: FEED Deliverables List and Format Guidelines** – A list of minimum required FEED deliverables (expanding on Section 4) with expected number of revisions to ensure consistency between the two FEED contractors. Contractor may propose any additional deliverables that may be required for complete FEED package.

- **Attachment 3: Proposal Templates and Forms** – A list of forms for inclusion in proposal submission, which may include a pricing breakdown form, a compliance matrix for RFP terms (where bidders indicate their compliance or exceptions to each item), and any required declarations (e.g., a no-conflict-of-interest declaration). Bidders should use these forms, where provided to structure their proposals.
- **Attachment 4: Draft FEED Contract Terms and Conditions** – A draft version of the contract terms that will be included in the signed contract with the selected FEED contractors shall include the general terms highlighted in Section 7, as well as project-specific clauses. Bidders must review these contract requirements and include any comments or requested modifications as part of their proposal (as noted in Section 3.2, Commercial Proposal).
- **Attachment 5**: **Health, Safety, Environment and Quality (HSEQ) Questionnaire** – A mandatory corporate HSEQ form is peovided. f applicable, any additional attachments such as HSE requirements, design standards, etc., would be listed here.

This RFP document, along with its attachments, constitutes the complete set of requirements for the Dual FEED for the LOHC facilities project. Bidders are expected to carefully review all sections and attachments. North Atlantic looks forward to receiving well-prepared proposals from capable bidders and proceeding with the successful execution of the dual FEED process.

## Attachment 1: Design Basis

***Provided as a Separate Document***

# Attachment 2: FEED Deliverables List, Format Guidelines and Minimum Number of Revisions

## Structure, Drafting, and Review Requirements

1. Language: English
2. Units: SI (mandatory)
3. Drawing Format: ISO A-series / PDF and native
4. Document Control:
    a. Title block with: Document Number, Revision, Date, Author, Checker, Approver
    b. Revision history with description of changes
    c. “Issued for FEED” stamp
5. 3D Model Requirements:
    a. AVEVA E3D or equivalent
    b. 30% FEED design review snapshots
    c. Model export in IFC format

## FEED Deliverables Register (Full List)

### Table A2.1 Project Management and Execution

| Deliverable | Description | Format |
|---|---|---|
| Project Execution Plan (PEP) | Full FEED execution methodology | PDF + Native |
| Interface Management Plan | Interfaces between hydrogenation/dehydrogenation units, utilities, FEED contractor and owner teams | PDF |
| Risk Register & Mitigation Plan | Identification and ranking of risks with mitigation actions | Excel + PDF |
| FEED Schedule (Level 3) | Resource-loaded schedule; critical path | Primavera (.xer) + PDF |
| FEED Progress Reports | Monthly progress; S-curves; risks | PDF |
| Change Management Procedure | FEED variation control | PDF |

### Table A2.2 Process Engineering

| Deliverable | Description |
|---|---|
| Design Basis Memorandum | Process, operating, and design criteria |
| Process Design Criteria | Codes and Design Margins |
| Process Flow Diagrams (PFDs) | With stream tables and H&MBs |
| Heat & Material Balances | For all cases: normal, turndown, startup |

| Deliverable | Description |
|---|---|
| Piping & Instrumentation Diagrams (P&IDs) | All systems, including shutdown functions |
| Process Descriptions | Narrative per unit |
| Utility Summaries | Electrical load, cooling, heating, instrument air |
| Chemicals Summary | Various chemicals required as dosing or for catalyst activity and performance etc... |
| Emissions and effluent Summary | Continuous or intermittent gaseous emissions and any liquid effluent discharges. |
| Process Safeguarding Memorandum | Overpressure protection, relief philosophy |
| Cause & Effect Diagrams (C&E) | Facility-level shutdowns |
| Relief Load summary and Calculations | For all PSVs |
| Control Philosophy | DCS/PLC, SIS architecture |
| Hazardous Area Classification | Drawings + basis |
| Process Simulation Files | Fully converged cases |

Table A2.3 Mechanical Engineering

| Deliverables | Content |
|---|---|
| Mechanical Equipment Datasheets | All major equipment |
| Mechanical Design Criteria | Codes, materials, design temperature/pressure |
| Rotating Equipment Specification | Compressors, pumps |
| Static Equipment Design | Vessels, reactors, tanks |
| Fired Heater/Dehydrogenation Heater Specs | Fired heaters |
| Materials Selection Diagram | Material Selection |
| HVAC Engineering | Load and equipment lists |

Table A2.4 Piping Engineering

| Deliverable | Description |
|---|---|
| Piping Material Class Index | Full MOC and ratings |
| Line List | All lines tagged, sizes, MOC |
| Valve List | Type, MOC, class |

| Deliverable | Description |
|---|---|
| Tie-in List | All battery limits |
| Specialty Items List | All piping speciality items |
| Battery Limit Interface Tables | List of all pipelines in and out of the unit |
| Plot Plan | Full site layout |
| 3D Piping Model Snapshots | 30/60/90% as applicable. |
| Stress Analysis Reports | Critical lines |

Table A2.5 Electrical Engineering

| Deliverable | Description |
|---|---|
| Electrical Design Criteria | Codes and Standards, Power System Philosophy |
| Electrical Load List | All equipment |
| One-Line Diagrams | MV/LV systems |
| Substation Layout | If applicable |
| Earthing Study | Calculations + layout |
| Cable Routing Plan | Trays, sizing, segregation |
| Hazardous Area Electrical Review | Compliance |

Table A2.6 Instrumentation & Control

| Deliverable | Description |
|---|---|
| Instrumentation Design Criteria | Codes and Standards, Control System Philosophy |
| Instrument Index | Complete list |
| I/O List | With DCS/SIS segregation |
| Control Narratives | All process units |
| SIS Architecture & SIL Assessment | LOPA results |
| Instrument Datasheets | All field devices |
| Interlocks and Logic Diagrams | Shutdown, permissive logic |

### Table A2.7 Civil/Structural

| Deliverable | Description |
|---|---|
| Design Basis | Contractor to provide required information for BoP FEED contractor such as Loads, etc. |
| Geotechnical Interpretation | From owner's survey |
| Foundation Design | Contractor to provide required FFED level civil load information to BoP FEED contractor |
| Structural Steel Plans | Units, pipe racks |
| Roads, Drainage, Paving Layout | By BoP FEED contractor. Contractor to provide required information. |

### Table A2.8 Safety & Environment

| Deliverable | Description |
|---|---|
| HAZID Report | Early-phase hazard identification |
| HAZOP Report | Full node-by-node |
| LOPA Report | SIL assignment |
| Quantitative Risk Assessment (QRA) | Fire/explosion modeling |
| Environmental Impact Memorandum | Emission sources and controls |
| Fire Protection Layouts | F&G device, hydrants, extinguishers |

### Table A2. 9 Cost & Estimating

| Deliverable | Description |
|---|---|
| Class 3 CAPEX Estimate | -10/+15% |
| BOE (Basis of Estimate) | Assumptions, factors |
| Vendor Quotes (Major Equipment) | 3 competitive quotes (where possible) |
| OPEX Estimate | OPEX |

### Table A2.10 FEED and EPF Schedule

| Deliverables | Description |
|---|---|
| FEED Schedule – Level 3 | Proposed FEED schedule for FEED execution |
| EPF Schedule – Level 3 | Expected EPF Schedule after FEED |

## Table A2.11 FEED Reports

| Deliverables | Description |
|---|---|
| FEED Report | Full FEED Report (Master Document) |
| Execution Recommendations | Proposed Project execution recommendations |
| Key Design Decisions Register | |
| Detailed Design Work Scope | Scope for EPF Model Execution |

## Table A2.12 FEED Deliverables – Owner Minimum Requirements

| Project Management | | | | |
|---|---|---|---|---|
| Deliverable | IFR | IFA | IFD | IFI |
| Project Execution Plan | ✓ | ✓ | | |
| Interface Management Plan | | ✓ | | |
| Risk Register & Mitigation Plan | | ✓ | | |
| FEED Schedule (Level 3) | ✓ | | ✓ | |
| FEED Progress Reports | | ✓ | | |
| Change Management Procedure | | ✓ | | |
| **Process Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Design Basis Memorandum | ✓ | | ✓ | |
| Process Design Criteria | ✓ | | ✓ | |
| Process Flow Diagrams | ✓ | | ✓ | |
| Heat & Material Balances | ✓ | | ✓ | |
| Piping & Instrumentation Diagrams | ✓ | ✓ | ✓ | |
| Process Description | ✓ | | ✓ | |
| Utility Summary | ✓ | | ✓ | |
| Chemicals Summary | ✓ | | ✓ | |
| Emissions and Effluent Summary | ✓ | | ✓ | |
| Process Safeguarding Memorandum | ✓ | ✓ | ✓ | |
| Cause & Effect Diagrams | ✓ | ✓ | ✓ | |
| Relief Load Summary and Calculations | ✓ | | ✓ | |
| Control Philosophy | ✓ | ✓ | ✓ | |
| Hazardous Area Classifications | ✓ | | ✓ | |

| Deliverable | IFR | IFH | IFD | IFI |
|---|---|---|---|---|
| Process Simulation Files | | | | ✓ |
| **Mechanical Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Mechanical Equipment Datasheets | ✓ | | ✓ | |
| Mechanical Design Criteria | ✓ | | ✓ | |
| Rotating Equipment Specification | ✓ | | ✓ | |
| Static Equipment Design | ✓ | | ✓ | |
| Fired Heater / Dehydrogenation Heater Specifications | ✓ | | ✓ | |
| Material Selection Diagram | ✓ | | ✓ | |
| HVAC Engineering | ✓ | | ✓ | |
| **Piping Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Piping Material Class index | ✓ | | ✓ | |
| Line List | ✓ | ✓ | ✓ | |
| Valve List | ✓ | | ✓ | |
| Tie-in List | ✓ | | ✓ | |
| Specialty Items List | ✓ | | ✓ | |
| Battery Limit Interface Tables | ✓ | | ✓ | |
| Plot Plan | ✓ | | ✓ | |
| 3D Piping Model Snapshots | ✓ | | | |
| Stress Analysis Reports | ✓ | | ✓ | |
| **Electrical Engineering** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Electrical Design Criteria | ✓ | | ✓ | |
| Electrical Load List | ✓ | | ✓ | |
| One-Line Diagrams | ✓ | | ✓ | |
| Substation Layout | ✓ | | ✓ | |
| Earthing Study | ✓ | | ✓ | |
| Cable Routing Plan | ✓ | | ✓ | |
| Hazardous Area Electrical Review | ✓ | | ✓ | |

| Instrumentation & Control | | | | |
|---|---|---|---|---|
| Deliverable | IFR | IFH | IFD | IFI |
| Instrumentation Design Criteria | ✓ | | ✓ | |
| Instrument Index | ✓ | | ✓ | |
| I/O List | | | | ✓ |
| Control Narratives | ✓ | ✓ | ✓ | |
| SIS Architecture & SIL Assessment | ✓ | | ✓ | |
| Instrument Datasheets | ✓ | | ✓ | |
| Interlocks and Logic Diagrams | ✓ | ✓ | ✓ | |
| **Civil / Structural** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Design Basis | ✓ | | ✓ | |
| Geotechnical Interpretation | ✓ | | | |
| Foundation Design | ✓ | | ✓ | |
| Structural Steel Plans | ✓ | | ✓ | |
| Roads, Drainage, Paving Layout | ✓ | | ✓ | |
| **Safety & Environmental** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| HAZID Report | ✓ | | ✓ | |
| HAZOP Report | ✓ | | ✓ | |
| LOPA Report | ✓ | | ✓ | |
| Quantitative Risk Assessment | ✓ | | ✓ | |
| Environmental Impact Memorandum | ✓ | | ✓ | |
| Fire Protection Layouts | ✓ | | ✓ | |
| **Cost & Estimating** | | | | |
| Deliverable | IFR | IFH | IFD | IFI |
| Class 3 CAPEX Estimate | ✓ | | ✓ | |
| Basis of Estimate | ✓ | | ✓ | |
| Vandor Quotes (Major Equipment) | ✓ | | | |
| OPEX Estimate | ✓ | | ✓ | |

| FEED Reports | | | | |
|---|---|---|---|---|
| Deliverable | IFR | IFH | IFD | IFI |
| Final FEED Report (Master Document) | ✓ | | ✓ | |
| Execution Recommendations | ✓ | | | |
| Key Design Register | ✓ | | | |

*IFA – Issued for Approval, IFD – Issued for Design, IFH – Issued for HAZOP, IFI – Issued for Information, IFR – Issued for Review.

# Attachment 3: Proposal Template and Forms

Bidders must complete and submit the following forms.

## Bidder's Compliance Matrix

Bidders must complete the following table showing compliance vs deviations.

| RFP Section | Requirement Summary | Complies? (Y/N) | Bidder Comment |
|---|---|---|---|
| Section 2 | Complete FEED scope | Y/N | |
| Section 3 | Dual FEED confidentiality | Y/N | |
| Section 4 | Full deliverables submission | Y/N | |
| Section 7 | Contract terms | Y/N | |
| Attachment 4 | FEED contract acceptance | Y/N | |

## Bidder's Technical Forms

### Form T-1: Bidder Experience Summary

| Project Type | Year | Scope | Key Achievements | Client (Generic) |
|---|---|---|---|---|
| … | … | … | … | … |

### Form T-2: Key Personnel List

| Position | Name | Experience (years) | Relevant FEED Experience | Availability (%) |
|---|---|---|---|---|
| … | … | … | … | … |

### Form T-3: Technology Summary

Indicative parameters are shown below, Bidder is free to update it with relevant parameters as applicable to the technology.

| Parameter | Bidder Value | Notes |
|---|---|---|
| Hydrogenation Conversion (%) | | |
| Dehydrogenation Efficiency (%) | | |
| Energy Consumption (kWh/kg H2) | | |
| LOHC Degradation Rate (%) | | |
| Catalyst Life (years) | | |

In lieu of the above table, bidder may submit the key technology summary as deemed applicable.

## Bidder's Commercial Forms

Bidder shall submit the following forms as mentioned below in bidder's format. The minimum information required to be included is as listed in each of the sections. Some of the forms are also included for reference.

### Form C-1: Lump-Sum FEED Pricing

| Cost Category | Amount |
|---|---|
| Engineering Man-hours | |
| Specialist Subcontractors | |
| Studies & Safety | |
| Travel & Expenses | |
| Overheads & Profit | |
| **TOTAL FEED PRICE** | |

## Form C-2: Indicative Rate Schedule

| Items | Hydrogenation Plant (40 hour / Week) | Dehydrogenation Plant (40 Hour / week | FEED Total (40 hour/week) |
|---|---|---|---|
| 1 Project Management | | | |
| 2 Risk Management | | | |
| 3 Quality Management | | | |
| 4 Project Controls | | | |
| 4.1 Planning and Scheduling | | | |
| 4.2 Cost Estimating | | | |
| 5 Engineering | | | |
| 5.1 Engineering Management | | | |
| 5.2 Process Engineering | | | |
| 5.3 Geotechnical Engineering | | | |
| 5.4 CSA Engineering | | | |
| 5.6 Mechanical Engineering | | | |
| 5.7 HVAC | | | |
| 5.8 Piping Engineering | | | |
| 5.9 Process, Environment and Fire Safety | | | |
| 5.10 Electrical Engineering | | | |
| 5.11 Control and Automation Engineering | | | |
| 6 Procurement & Logistics | | | |
| 7 Construction Management | | | |
| 8 Information Management | | | |
| 9 Document Management | | | |
| 10 Any Other Function | | | |
| **TOTAL** | | | |

**NOTE 1:** Rate sheet at each location of work should be provided.
**NOTE 2:** Bidder to expand rate for each discipline by grade level.

## Form C-3: Payment Milestones

| Milestone | Deliverable | % Payment |
|---|---|---|
| Kickoff | Mobilization | X% |
| 30% Package | Design Basis, PFDs and HMB | X% |
| 60% Package | P&IDs, Plot Plan | X% |
| 90% Package | Cost Estimate | X% |
| Final FEED | All FEED Deliverables - final | X% |

## Form C-4: Exceptions to Contract

| Clause | Bidder Exception | Proposed Alternative |
|---|---|---|
| … | … | … |

## Form C-5: Technology Licensing Declaration

Bidders must declare:

- Whether FEED includes technology license
- Any license fee (one-time)
- Any royalty or catalyst proprietary requirements

# Attachment 4: Draft FEED Contract Terms and Conditions

## Contract Type

- Lump-sum FEED contract
- No adjustment except agreed variations

## Contractor Obligations

Contractor shall:

- Perform FEED with due professional care
- Provide competent personnel
- Maintain quality systems
- Deliver all FEED documents complete and on time
- Coordinate with North Atlantic's FEED oversight team
- Maintain confidentiality and data protection

## North Atlantic Obligations

North Atlantic shall:

- Provide input data, site information
- Review submissions in 10 working days
- Pay invoices per payment schedule
- Provide timely clarifications

## Schedule & Deliverables

- Contractor shall meet the FEED schedule
- Delays attributable to Contractor may trigger LDs (liquidated damages)
- Deliverables as per Attachment 2

## Payment Terms

- Milestone-based
- Invoices payable net 30 days
- Retainage: 5% until FEED acceptance

## Variations

- Any change to the FEED scope requires written North Atlantic approval
- Variation orders must include:

- Change description
- Cost and schedule effect
- Revised deliverables

## Intellectual Property

- Contractor retains IP in proprietary technology
- North Atlantic owns all FEED deliverables
- North Atlantic granted perpetual right to use FEED outputs

## Confidentiality

- Both parties must protect confidential data
- No distribution without permission
- Dual FEED contractors must operate independently

## Liability & Insurance

- Contractor liable for errors/omissions up to 100% of FEED contract value
- Mandatory insurance:
  - Professional liability
  - Employer liability
  - General liability

## Termination

North Atlantic may terminate:

- For convenience (with compensation)
- For cause (non-performance)

Contractor may terminate only for North Atlantic material breach.

## Governing Law & Disputes

- Governing law: Specified by North Atlantic
- Dispute resolution:
  - Negotiation
  - Senior management meeting
  - Arbitration (ICC or UNCITRAL recommended)

## HSSE Requirements

Contractor must comply with:

- All HSSE rules
- Safety training for any site visits
- No work permitted without approved HSSE plan

## Code of Ethics

Contractor must maintain:

- Anti-corruption compliance
- Anti-bribery compliance
- Conflict of interest disclosure

Breaches may result in termination.

# Attachment 5: Health, Safety, Environment and Quality (HSEQ) Questionnaire

# Health, Safety, Environment and Quality (HSEQ) Questionnaire

**Please complete the relevant sections. If a question is not applicable to the scope of work, please mark "NA".**

## Company Information

| | |
|---|---|
| **Company Name** | |
| **Address** | |
| **Contact Name** | **Title** |
| **Telephone** | **E-mail** |
| **Number of Employees** | |

*Please list or attach any additional information you feel is relevant in demonstrating Health, Safety, Environment and Quality Management*

## Quality Management

| | |
|---|---|
| Have you implemented a Quality Management System? | ☐ Yes ☐ No |
| Is your company registered to ISO 9001 or other recognized standard? *Please provide a copy of certificate(s).* | ☐ Yes ☐ No |
| If "No", is your system compliant to ISO 9001 requirements? | ☐ Yes ☐ No |

If you do not have a Quality Management System, what processes and practices do you have in place to ensure that you are capable of meeting contractual requirements, including those relating to product or service quality.

What is your process for management of changes?

How do you identify problems that have the potential to affect your customer deliverables?

Please provide a copy of your Quality Policy, if available

## Health, Safety & Environmental Management

| | |
|---|---|
| Have you implemented an Occupational Health & Safety Management System? | ☐ Yes ☐ No |
| Have you implemented an Environmental Management System? | ☐ Yes ☐ No |

To which standards and regulatory requirements does your system comply (e.g. ISO 45001, PRIME, COR, ISO 14001, etc.) *Please provide a copy of certificate(s) if relevant.*

# Health, Safety, Environment and Quality (HSEQ) Questionnaire

Please provide a copy of:

- Health and Safety Policy
- Environmental Management Policy
- Drug and Alcohol Policy

Will your employees or subcontractors be visiting North Atlantic worksites or the worksite of North Atlantic's customers? If "Yes" please provide copies of: ☐ Yes ☐ No

- Certificate of Insurance
- Workplace NL Letter of Clearance
- Applicable training certificates

Does your company have a competency assurance and training program in place to ensure that personnel are qualified and competent to perform their work safely? ☐ Yes ☐ No

Does your company have a maintenance program to ensure that equipment is safe and fit for purpose? *Please provide details.* ☐ Yes ☐ No

How are health, safety and environmental risks and controls identified, controlled and communicated. *Please provide details of procedures and processes.*

Does your company identify potential environmental impacts associated with your work and operations? *Please provide details.* ☐ Yes ☐ No

Does your company have processes in place to ensure the protection and security of products, premises and client information? *Please provide details.* ☐ Yes ☐ No

## Supplier / Contractor Statement

All of the information provided in this document and attachments is complete, true and correct. I am authorized by my company to provide this information.

| | | | |
|---|---|---|---|
| **Name** | | **Title** | |
| **Email** | | **Telephone** | |
| **Signature** | | **Date** | |

*Comments:*

# Attachment 5: Proposal Template and Forms

Bidders must complete and submit the following forms.

## Bidder's Compliance Matrix

Bidders must complete the following table showing compliance vs deviations.

| RFP Section | Requirement Summary | Complies? (Y/N) | Bidder Comment |
|---|---|---|---|
| Section 3 | Proposal Submittal Requirements | Y/N | |
| Section 7 | Contract terms | Y/N | |
| Attachment 4 | OE contract acceptance | Y/N | |

## Bidder's Technical Forms

### Form T-1: Bidder Experience Summary

| Project Type | Year | Scope | Key Achievements | Client (Generic) |
|---|---|---|---|---|
| … | … | … | … | … |

### Form T-2: Key Personnel List

| Position | Name | Experience (years) | Relevant FEED Experience | Availability (%) |
|---|---|---|---|---|
| … | … | … | … | … |

## Bidder's Commercial Forms

Bidder shall submit the following forms as mentioned below in bidder's format. The minimum information required to be included is as listed in each of the sections. Some of the forms are also included for reference.

## Form C-1: Indicative Rate Schedule

| | NL Based Resource | | Alternate Location | | |
|---|---|---|---|---|---|
| OE Supplied PMT Role | Name | Hourly Rate (CAD / hour) | Location | Name | Hourly Rate (CAD / hour) |
| 1 Construction & Modularization Manager | | | | | |
| 2 Mechanical Engineer – 1 | | | | | |
| 3 Mechanical Engineer – 2 | | | | | |
| 4 I&C Engineer | | | | | |
| 5 Electrical Engineer | | | | | |
| 6 Control Systems Engineer | | | | | |
| 7 Civil Engineer | | | | | |
| 8 Process Engineer – 1 | | | | | |
| 9 Process Engineer – 2 | | | | | |
| 10 Project Controls Manager | | | | | |
| 11 Estimator | | | | | |
| 12 Scheduler | | | | | |
| 13 Document Controller | | | | | |
| 14 Procurement Manager | | | | | |
| 15 Logistics Coordinator | | | | | |
| 16 Contracts Coordinator | | | | | |

**NOTE 1:** Rate sheet at each location of work should be provided.
**NOTE 2:** Bidder is free to propose alternative levels of experience for each OE Supplied PMT Role.

## Form C-2: Exceptions to Contract

| Clause | Bidder Exception | Proposed Alternative |
|---|---|---|
| … | … | … |

# Attachment 6: Draft FEED Contract Terms and Conditions

## Contract Type

- Reimbursable Time and Materials Contract
- No adjustment except agreed variations

## Contractor Obligations

Contractor shall:

- Provide competent personnel
- Maintain quality systems
- Deliver all documents complete and on time
- Coordinate with North Atlantic's PMT
- Maintain confidentiality and data protection

## North Atlantic Obligations

North Atlantic shall:

- Provide input data, site information
- Review submissions in 10 working days
- Pay invoices per payment schedule
- Provide timely clarifications

## Schedule

- Contractor shall meet the FEED schedule
- Delays attributable to Contractor may trigger LDs (liquidated damages)

## Payment Terms

- Monthly, based on PMT approved timesheets for OE personnel
- Invoices payable net 30 days
- Retainage: 5% until FEED completion

## Variations

- Any change to the OE scope requires written North Atlantic approval
- Variation orders must include:
    - Change description
    - Cost and schedule effect

## Intellectual Property

- Contractor retains pre-existing IP
- North Atlantic owns all FEED deliverables
- North Atlantic owns all new IP generated through execution of the FEED
- North Atlantic granted perpetual right to use FEED outputs

## Confidentiality

- Both parties must protect confidential data
- No distribution without permission

## Liability & Insurance

- Contractor liable for errors/omissions up to 100% of invoiced cost for OE services
- Mandatory insurance:
  - Professional liability
  - Employer liability
  - General liability

## Termination

North Atlantic may terminate:

- For convenience (with compensation)
- For cause (non-performance)

Contractor may terminate only for North Atlantic material breach.

## Governing Law & Disputes

- Governing law: Specified by North Atlantic
- Dispute resolution:
  - Negotiation
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## HSSE Requirements

Contractor must comply with:

- All HSSE rules

- Safety training for any site visits
- No work permitted without approved HSSE plan

## Code of Ethics

Contractor must maintain:

- Anti-corruption compliance
- Anti-bribery compliance
- Conflict of interest disclosure

Breaches may result in termination.

# Attachment 7: Health, Safety, Environment and Quality (HSEQ) Questionnaire

North Atlantic

# Health, Safety, Environment and Quality (HSEQ) Questionnaire

**Please complete the relevant sections. If a question is not applicable to the scope of work, please mark "NA".**

## Company Information

| | |
|---|---|
| **Company Name** | |
| **Address** | |
| **Contact Name** | **Title** |
| **Telephone** | **E-mail** |
| **Number of Employees** | |

*Please list or attach any additional information you feel is relevant in demonstrating Health, Safety, Environment and Quality Management*

## Quality Management

| | |
|---|---|
| Have you implemented a Quality Management System? | ☐ Yes ☐ No |
| Is your company registered to ISO 9001 or other recognized standard? *Please provide a copy of certificate(s).* | ☐ Yes ☐ No |
| If "No", is your system compliant to ISO 9001 requirements? | ☐ Yes ☐ No |

If you do not have a Quality Management System, what processes and practices do you have in place to ensure that you are capable of meeting contractual requirements, including those relating to product or service quality.

What is your process for management of changes?

How do you identify problems that have the potential to affect your customer deliverables?

Please provide a copy of your Quality Policy, if available

## Health, Safety & Environmental Management

| | |
|---|---|
| Have you implemented an Occupational Health & Safety Management System? | ☐ Yes ☐ No |
| Have you implemented an Environmental Management System? | ☐ Yes ☐ No |

To which standards and regulatory requirements does your system comply (e.g. ISO 45001, PRIME, COR, ISO 14001, etc.) *Please provide a copy of certificate(s) if relevant.*

| North Atlantic | Health, Safety, Environment and Quality (HSEQ) Questionnaire |
|---|---|

Please provide a copy of:

- Health and Safety Policy
- Environmental Management Policy
- Drug and Alcohol Policy

Will your employees or subcontractors be visiting North Atlantic worksites or the worksite of North Atlantic's customers? If "Yes" please provide copies of: ☐ Yes ☐ No

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Does your company have a competency assurance and training program in place to ensure that personnel are qualified and competent to perform their work safely? ☐ Yes ☐ No

Does your company have a maintenance program to ensure that equipment is safe and fit for purpose? *Please provide details.* ☐ Yes ☐ No

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Does your company identify potential environmental impacts associated with your work and operations? *Please provide details.* ☐ Yes ☐ No

Does your company have processes in place to ensure the protection and security of products, premises and client information? *Please provide details.* ☐ Yes ☐ No

| Supplier / Contractor Statement | | | |
|---|---|---|---|
| All of the information provided in this document and attachments is complete, true and correct. I am authorized by my company to provide this information. | | | |
| **Name** | | **Title** | |
| **Email** | | **Telephone** | |
| **Signature** | | **Date** | |
| *Comments:* | | | |
| | | | |