Appendix E

Transportation Impact Study and Traffic Management Plan

Appendix E Transportation Impact Study and Traffic Management Plan

Argentia Renewables Project

Issued by: Argentia Renewables Wind LP Project Facility: All Locations Affected Facility: All Locations

Effective Date: July 31, 2024

Document Maintenance and Control

Argentia Renewables Wind LP (Argentia Renewables), an affiliate of Pattern Energy Group LP (Pattern), is responsible for the distribution, maintenance and updating of this Transportation Impact Study and Traffic Management Plan for the Argentia Renewables Project (the "Project"). This plan will be updated when needed for reasons including but not limited to reflecting changes in site-specific implementation, updating contact information, changes to scientific methods and survey best practices.

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| Item # | Description of Change | Relevant Section |
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Index of Major Changes/Modifications in Latest Version



Table of Contents

| 1.0 | Introduction | 1 |
|-------|--|-----|
| 1.1 | Legal | 1 |
| 1.2 | Scope | 1 |
| 1.3 | Objectives | 2 |
| 1.4 | Roles and Responsibilities | 2 |
| 2.0 | Road Infrastructure | З |
| 2.1 | Highways | 3 |
| 2.1.1 | Route 100 – Cape Shore Highway | 3 |
| 2.1.2 | Route 102 – Ship Harbour/Fox Harbour Road | 5 |
| 2.2 | Local Roads | . 5 |
| 2.2.1 | Port of Argentia and Project Roads | 7 |
| 2.3 | Bridges, Overpasses, and Culverts | 15 |
| 2.3.1 | Bridges and Overpasses | 15 |
| 2.3.2 | Culverts | 15 |
| 3.0 | Transport Methods | 15 |
| 3.1 | Load Ratings | 15 |
| 3.2 | Transport Vehicles | 16 |
| 4.0 | Traffic Analysis | 17 |
| 4.1 | Baseline Traffic Volume | 18 |
| 4.2 | Construction Phase Project Traffic Volume | 20 |
| 4.3 | Traffic Interactions Analysis | 20 |
| 4.4 | Operation and Maintenance Phase Project Traffic Volumes | 23 |
| 4.5 | Decommissioning and Rehabilitation Phase Project Traffic Volumes | 24 |
| 5.0 | Traffic Management Plan | 24 |
| 5.1 | Driver Conditions | 24 |
| 5.2 | Traffic Control Measures | 25 |
| 5.3 | Monitoring and Reporting | 25 |
| 5.3.1 | Incident and Complaint Reporting | 25 |
| 5.3.2 | Local Notifications and Community Communications | 25 |
| 5.3.3 | Dusting and Noise Concerns | 26 |
| 6.0 | Training | 26 |
| 6.1 | Driver Education | 26 |
| 7.0 | Emergency Contacts and Procedures | 26 |
| 8.0 | Plan Review and Updating | 28 |
| 9.0 | References | 28 |
| | | |

List of Figures

| Figure E-2.1.1-1 | Regional Roadways – Whitbourne to Placentia | 4 |
|------------------|---|-----|
| Figure E-2.2-1 | Regional Roadways – Town of Placentia | 6 |
| Figure E-2.2.1-1 | Port of Argentia Roadways | 8 |
| Figure E-2.2.1-2 | Project Infrastructure Access Routes (Current vs Planned) | 9 |
| Figure E-2.2.1-3 | Standard Blade Truck Templates – Various Bends (CPL 2023) | .12 |
| Figure E-2.2.1-4 | Standard Blade Truck Templates – 90° Bend (CPL 2023) | .13 |



| Figure E-3.2-1 | Blade Transport Example Construction Vehicle. | 17 |
|----------------|--|----|
| Figure E-4.1-1 | Traffic Survey Locations - NL DTI 2016. | 19 |
| Figure E-4.3-1 | Project Infrastructure Area Map. | 21 |
| Figure E-4.3-2 | Project Transportation Access via Public Roads | 22 |

List of Tables

| Table E-2.2.1-1 | Preliminary Layout Design Basis (CPL 2023) | 11 |
|-----------------|---|----|
| Table E-3.1-1 | Maximum Allowable Overweight and Over Dimension under the Vehicle Regulations | |
| | 2002 | 16 |
| Table E-4.1-1 | Traffic Survey Data – NL DTI 2016. | 18 |
| Table E-4.2-1 | Wind Turbine Component Transport Times | 20 |
| Table E-4.2-2 | Wind Turbine Component Specifications for the 6.8 MW Wind Turbine | 20 |
| Table E-4.3-1 | Project Area Locations by Turbine Site Number | 20 |
| Table E-7.0-1 | Argentia Renewables Contact Information | 26 |



1.0 Introduction

This Transportation Impact Study (TIS) and Traffic Management Plan (TMP) have been developed by Argentia Renewables Wind LP (Argentia Renewables), an affiliate of Pattern Energy Group LP (Pattern) for the Argentia Renewables Project (the Project), which involves the Construction, Operation and Maintenance, and eventual Decommissioning and Rehabilitation of an onshore wind energy generation facility (Argentia Wind Facility) and a green hydrogen and ammonia production, storage, and export facility (Argentia Green Fuels Facility). This plan focuses on the sections of existing public roads within the Project Area; however, attention is also given to the private (Port of Argentia (POA) and Project extensions) road networks that will be used for the Project.

The TIS examines the required utilization of existing infrastructure for transporting oversized and overweight Project materials and equipment, especially during Project Construction Phase, and the potential interaction with other traffic along the proposed transportation routes. The TMP identifies mitigation and control measures for Project-related traffic during all phases of the Project.

Project wind turbine components will be received at the POA dock and subsequently transported to a laydown area on the POA property prior to delivery to each turbine site for erection. Only short sections of public roads will be required for transport of large (oversize and overweight) equipment items. Other Project usage of the public road network will be limited generally to conventional vehicles and loads associated with personnel, supplies, and service transportation.

1.1 Legal

This document has been developed in compliance with the requirements of the Province of Newfoundland and Labrador. As a component of a Project Registration under the **Environmental Protection Act (Environmental Assessment Regulations)**, this document is considered to reflect a commitment by Argentia Renewables to carry out the actions described and to report on results achieved.

1.2 Scope

The TIS and TMP assesses the potential effects of transporting oversized and overweight Project materials and equipment over existing roadways, during the Construction Phase, Operation and Maintenance Phase, and Decommissioning and Rehabilitation Phase of the Argentia Renewables Project. The focus of attention has been placed on the Construction Phase as it involves the bulk of Project materials and equipment transport.



In April 2023, the NL Department of Environment and Climate Change (NL DECC) - Environmental Assessment Division, issued its Guidance for Registration of Onshore Wind Energy Generation and Green Hydrogen Production Projects. The intent of this TIS and TMP is to comply with Section 4.5 (item #4) of the Guidance document.

1.3 Objectives

The objective of this TIS and TMP is to identify the potential effects of Project traffic on public roads and traffic, and to develop mitigation measures that will reduce or avoid negative effects.

1.4 Roles and Responsibilities

Argentia Renewables will be accountable for the review and acceptance of the TIS and TMP. All employees, contractors, and visitors to the Project site will be made aware of this document during orientation. The following roles have specific duties regarding Traffic Management:

Executive Staff:

- Responsible for the entire Project governance.
- Responsible for overall transport and traffic law compliance of the Company.
- Responsible to ensure all support and resources are available to successfully implement the TMP.

Project Manager:

- Responsible to ensure permits and all authorization conditions are in place and known to managers.
- Manage the development and application of all permits and required authorizations from applicable municipal, provincial and federal regulators.

Construction Manager:

- Provide required supports and resources for the TMP.
- Ensure equipment and transport compliance of all permits and authorizations.
- Report to the on-site Environmental staff of any traffic incidents or sightings of wildlife by construction staff.
- Ensure staff are working safely and following all traffic policies and Rules of the Road.

Occupational Health and Safety Manager:

- Provide training and resources related to health and safety at the Project site for all stages of the Project (including traffic safety).
- Promote and maintain safe working conditions through policies and procedures.
- Meet all legislative requirements related to health and safety.



- Investigate, track, and report all near misses and incidents related to the Project.
- Analyse and conduct lessons learned to avoid recurrence.
- Develop and enforce policies related to the Project.

Environmental Manager:

- Investigate and document any environmental incidents, interactions, or sightings.
- Ensure all staff are updated on weather conditions that could potentially impede or restrict transportation activities.

All Employees and Contractors:

- Complete orientation and training on traffic issues and management procedures specific to their area or work type.
- Aware of traffic management procedures related to their area or work type.

2.0 Road Infrastructure

This section of the management plan describes the existing road network in the Project area, including public highways, and the road network within the Town of Placentia. Infrastructure access roads to be constructed for the Project are also described.

2.1 Highways

2.1.1 Route 100 – Cape Shore Highway

Route 100 – Cape Shore Highway (Figure E-2.1.1-1) is a 108 km undivided two-lane, two-way highway with intermittent siding passing lanes, and has a posted speed limit of 100 km/h, with speed reductions through residential areas. The highway forms the primary access route for the area, connecting to the Trans-Canada Highway at Whitbourne, and branching at Freshwater. One branch leads directly to the ferry terminal in the POA (Route 100-11), while the second leg extends south along the coastline of eastern Placentia Bay, also known as the Cape Shore, terminating in the town of Branch (Route 100-S). Along with the Trans-Canada Highway, Route 100 is a major transportation route capable of accommodating transportation demands associated with the Project.





| Pattern Argentia Renewables | FIGURE NUMBER: E - 2.1.1 - 1 | COORDINATE SYSTEM: NAD 1983 CSRS UTM Zone 22N | PREPARED BY: C. Bursey | DATE: 06/06/2024 |
|--------------------------------|---|--|---------------------------|---------------------|
| | FIGURE TITLE Regional Roadways - Whitbourne to Placentia | NOTES: Roads data sourced from National Topographic Service (CanVec) | REVIEWED BY: | |
| | PROJECT TITLE Argentia Renewables | | S S | em |

2.1.2 Route 102 – Ship Harbour/Fox Harbour Road

Route 102 – Ship Harbour / Fox Harbour Road is a 24 km access route connecting the communities of Fox Harbour and Ship Harbour to Route 100 at Dunville. It is a two-way, undivided two-lane access route and has a posted speed limit of 60 km/h, however, speed limits are reduced in residential areas.

2.2 Local Roads

The main routes within the Town of Placentia (Figure E-2.2-1) are two-way, undivided two-lane roadways. Some side roads and streets are reduced to single-direction single laneways, or two-direction one lane roads. While most streets are interconnected or have separate entry and exit routes, other roads and streets terminate without a connection or proper exit. In more rural parts of the municipality some roadways are reduced to two-way, single or double lane paved or unpaved roadways. Route 100 traverses two separate parts of the municipality and constitutes the major access for the area. The posted speed limit is 50 km/h within the municipality and residential areas.





FIGURE TITLE: NOTES: Pattern Argentia Renewables EVIEWED BY Roads data sourced from National Topographic Service (CanVec) Regional Roadways - Town of Placentia APPROVED BY PROJECT TITLE: Argentia Renewables SEM MAP ID: 238-005-GIS-121-Rev0

2.2.1 Port of Argentia and Project Roads

The POA is an industrial marine port, located approximately 5 km north of the community of Placentia. Currently, the traffic pattern on roads serving the POA comprise a mix of users including industrial vehicles linked to POA operations, the transportation of goods, service and maintenance vehicles for POA facilities, commuter traffic associated with the Cenovus construction site, tourist traffic associated with the Marine Atlantic Ferry Service, and general traffic serving the local area. The frequency of traffic on these roads varies throughout the day and week, correlating with vessel schedules, cargo handling activities, and operational shifts at the POA. Commuter traffic adheres to consistent patterns in alignment with the work schedules of the local population (Porter 2023).

The POA road network (Figure E-2.2.1-1) is mostly two-lane, two-way undivided roads, with Route 100-11 bisecting the area, terminating at the Marine Atlantic Ferry Terminal.

In 2023, upgrades were completed to Waterfront Drive within the POA. This project included the widening of the road as well as the selected relocation or burial of Collector Lines. The existing road was excavated and rebuilt using rockfill. The upgraded road can now accommodate loads of up to 8.8t/m² which greatly exceeds the typical day-to-day vehicle and trucks loads use for general operations at the port. The primary objective of these enhancements was to facilitate the efficient and safe transportation of monopiles from the marine terminal to the runway area. These improvements represent a proactive effort to optimize the POA's logistics and infrastructure, ultimately contributing to the smooth flow of goods and materials supporting a variety of industries (Roche 2023).

The Project will utilize a combination of the existing POA road network and the newly constructed roads. Figure E-2.2.1-2 presents the layout of the current existing roadways as well as the extent of proposed new construction or upgraded roads required to support equipment delivery to the wind turbine sites. Modifications include upgrading road base, widening of the roadway and shoulders, and in some instances, realigning and altering curvature to achieve restricted turning radii (Porter 2023).





SEM MAP ID: 238-005-GIS-122-Rev0



PROJECT TITLE:

Argentia Renewables

| SEMA | ASP ID | 238-005-015-138-Deu1 |
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Topographic Service (CanVec)

As part of the preliminary design process, a study was conducted to develop Project requirements for road widths, grades and turning radii (Porter 2023). This work was completed prior to detailed design of the Project and will be updated as the design process progresses. The preliminary design basis is scaled from a reference project built using a comparable turbine model and experience in similar terrain. Table E-2.2.1-1 provides an overview of the preliminary layout design basis.

The design parameters developed for Road Bend and Intersections are illustrated in Figures E-2.2.1-3, E-2.2.1-4 and E-2.2.1-5 below, and are based on a reference turbine model, which will need to be refined once a final turbine model has been selected (Porter 2023).



Preliminary Layout Design Basis (CPL 2023). Table E-2.2.1-1

| | Argentia |
|------------------------------------|-----------------------|
| Turbino | Project |
| Blade Longth | 80 m |
| Hub Hoight | 110 m |
| Nacelle Weight Only | 87 mT |
| Tower Sections | 5 |
| Tower Section Max Length | 27 0 m |
| Tower Section Max Weight | 71 mT (max) |
| Blade Transport Vehicle | Single Tridem Ayle |
| Nacelle Transport Vehicle | |
| Site Works | |
| Subgrade | |
| Grubbing and Stripping Depth | 0.3 m |
| Overburden Denth | 1.5 m |
| Typical Boad Section | 1.0 m |
| Bunning Surface Width | 4 8 m |
| Cross Slope | 2% |
| Boad Base Thickness | 0.3 m |
| Boad Surfacing Thickness | 0.1 m |
| Cut Slopes in Bock | 1.4 |
| Cut Slopes in Overburden | 1.5.1 |
| Overburden Slope Set Back | 1.0 m |
| Fill Slopes | Bockfill 1 5 1 |
| | Other 2:1 |
| Ditch W x D | 0.5 m x 0.5 m |
| Minimum Clearing Width | Top of Cut + 3.0 m |
| 5 | Base of Fill + 1.0 m |
| | 15 m minimum |
| Road Geometric Design | |
| Minimum Horizonal Curve Radius | 200 m |
| No Widening (0 to 45°) | |
| Minimum Horizonal Curve Radius | 100 m |
| 50% Widening (0 to 45°) | |
| Turn Around Area Radius | Crane Assist |
| Minimum Vertical Curve K | 18.0 m |
| $(K = Lc / \Delta G)$ | |
| Maximum Normal Grade | 8% |
| Maximum Grade (with Assist) | 13% |
| Road Straight at Turbine Areas | Preferred 120 m |
| | Minimum 80 m |
| | Grade: 0% preferred, |
| Tauhing Areas | 2% max |
| Turbine Areas | |
| Delivery and Assembly Basis | Full Steel Tower |
| | Cingle Blede Delivery |
| | Single Blade Delivery |
| Crane Hard Stand Area | 30 m v 25 m |
| | 80 m x 55 m |
| Additional Road Widening for Cross | 100 m v 5 m |
| Boom Assembly | |





Figure E-2.2.1-3 Standard Blade Truck Templates – Various Bends (CPL 2023).





Figure E-2.2.1-4 Standard Blade Truck Templates – 90° Bend (CPL 2023).





Figure E-2.2.1-5 Standard Blade Truck Templates – S-Curve and Jug-Handle (CPL 2023).



2.3 Bridges, Overpasses, and Culverts

2.3.1 Bridges and Overpasses

There is one overpass located in the Project Area that may be used for the transportation of oversized or overweight loads. The overpass is located at the intersection of Cooper Drive and Highway 102 leading into the Argentia Peninsula. In general, the Project will avoid use of this overpass for large components; wind turbine components will arrive to the POA via vessel and will not be transported over this overpass, however, transportation of other oversized or overweight equipment and materials for the Argentia Green Fuels Facility may be required. In the event the overpass cannot be avoided for transportation of an oversized or overweight load, an application for an *Overweight and Over Dimensional Special Permit* will be applied for as per the **Vehicle Regulations**, 2002 under the **Highway Traffic Act**.

2.3.2 Culverts

Culverts, while not a physical obstruction, can present a limit on the load weight and width for safe travel. When planning transport routes, culvert crossings will be avoided where possible. In the instance a culvert cannot be avoided, Argentia Renewables will take the following precautions:

- A qualified inspector will conduct a culvert inspection and determine load capacities.
- Reduce loads to fall within the determined capacity, e.g. by making multiple trips rather than a single trip.
- If unavoidable, apply measures such as reinforcing the culvert, widening roads, or constructing temporary routing around the road section.

3.0 Transport Methods

The required major components for the Project will be transported by sea to the POA. From dockside, road transport will deliver equipment to the assembly/erection sites. Most deliveries to the Argentia Green Fuels Facility will involve very short distances, all within the POA boundaries. Wind turbine parts will require access within the Project roadway network, and, to a very limited extent, along sections of public roads.

3.1 Load Ratings

Vehicles that exceed weight and dimension limits as prescribed in the **Vehicle Regulations**, 2002 under the **Highway Traffic Act**, must apply to Service NL, Motor Vehicle Division for an *Overweight and Over Dimensional Special Permit*. This permit can be issued for either a single trip or on an annual basis. Each permit type has a different list of specifications regarding the vehicle's overall weight, width, height, and



length, including overhangs. Table E-3.1-1 below presents the difference of allowed weights and dimensions based on a Single or Annual Permit.

| | Maximum Mass | Maximum Dimension (m) | | | | |
|------------------|--|-----------------------|--------|----------------|------------------|--------|
| | (kg) | Width | Height | Front Overhang | Rear Overhang | Length |
| Single Trip | 70,000 (120,000 two vehicle concept) | 4.88 | 4.88 | 3.1 | 6.2 | 35 |
| Annual Permit | 64,000 | 4.27 | 4.5 | 3.1 | 5.5 | 30 |

 Table E-3.1-1 Maximum Allowable Overweight and Over Dimension under the Vehicle Regulations 2002.

It is also important to note, that a vehicle's axle weight, axle spacings, tire sizes, and tire numbers may also result in an additional Excessive Overweight/Over Dimension permit, a subcategory of the same permit application.

3.2 Transport Vehicles

The wind turbine components will be transported by a series of triple tridem axle flatbed style conventional transport trailers, and in the case of the wind turbine blades, by a specialized single tridem axle transport (Figure E-3.2-1). These types of transports have a relatively small turning radius enabling transport in areas of high topographic relief. This system enables navigation of compact roadways with steep grades and tight turns, such as are present within the Argentia Backlands of the POA. As the dimensions of the Project equipment and components required for transport have not been fully defined, the vertical and horizontal clearances will need to be assessed once detailed design of the Project has been completed.





Figure E-3.2-1 Blade Transport Example Construction Vehicle.

Construction vehicles and heavy equipment, such as excavators, cranes, concrete trucks, and front-end loaders, make up another portion of vehicles that will be used during the Construction Phase of the Project. Most vehicles are highway capable, and some may require an Overweight / Over Dimensional permit from ServiceNL depending on the vehicle).

Tracked construction equipment such as excavators as well as those with limited self-travel ability will be transported on float trailers. Two styles are commonly used – flatbeds and "gooseneck" trailers. These types typically have a weight range of 2 to- 35 tonnes.

4.0 Traffic Analysis

This section provides an overview of the existing usage of public roadways in the Project area as well as estimates for Project traffic during the Construction Phase. The potential implications of transporting oversized and overweight vehicles on public roads is then considered in light of potential effects on other traffic.

The POA is strategically located at the pre-existing industrial area which is appropriately zoned as "Industrial" by the Town of Placentia and is connected to a well-developed road transportation network. It is conveniently situated within a reasonable distance from the urbanized industrial zones of the northeastern Avalon Peninsula, making it a significant hub for moving cargo daily and provides the 40



tenants of the site with access to services such as repairs, supplies, housing, and other services (Roche 2023).

4.1 Baseline Traffic Volume

Annual Average Daily Traffic (AADT) volumes are the combined metric used to determine the amount a roadway is used. In February 2016, the NL Department of Transportation and Infrastructure (NLDTI formerly Department of Transportation and Works) conducted a 24-hour traffic survey in the Placentia area. Vehicles were captured using radar stations located as indicated on Figure E-4.1-1. Summary results of the survey have not been published but are available on request from the NLDTI; summary results are presented in Table E-4.1-1.

| Station Location | Station ID: | AADT | % Trucks |
|---|-------------|-------|----------|
| Junction 100-15 Int to Fox Hr on Route 100 south of Fox Harbour Rd | 47 | 3,497 | 8.58% |
| Junction 100-15 Int to Fox Hr on Fox Harbour Rd | 48 | 679 | 3.60% |
| Junction 100-20 Int to Ferndale on Route 100 south of Ferndale Rd | 49 | 1,558 | 8.41% |
| Junction 100-25 Int to Argentia on Route 100 just past Argentia Rd | 50 | 1,665 | 4.90% |

Table E-4.1-1 Traffic Survey Data – NL DTI 2016.

Station 47, located on Route 100 south of the Fox Harbour Road junction, exhibits the highest usage among the local population, with an Average Annual Daily Traffic (AADT) of 3,497 over a 24-hour period. This outcome is expected, given that the station captures all traffic traveling along Route 100 to and from the Placentia area via the Trans-Canada Highway. Station 48, located on the Fox Harbour Highway, showed the lowest AADT, with 679. This is consistent as both Fox Harbour and Ship Harbour have a lower population compared to the entirety of the Placentia area. Station 49, located at the junction of Route 100 and Ferndale Road, intercepts a portion of the traffic traveling between the highway and the local area, as well as those heading towards the Town of Placentia and further along the Cape Shore route. Ferndale Road serves as an example of an alternate eastern route providing access to the lower part of the peninsula, distinct from the Route 100-S branch that passes through Placentia. Station 50, located on Route 100 west of the junction with Route 100-S leading to the Town of Placentia, captures traffic traveling to and from the POA. This survey provides a baseline for traffic flow in the area and is exclusive of both the Cenovus White Rose Extension Project and the seasonal Marine Atlantic ferry operations.



FIGURE TITLE:

PROJECT TITLE:

Argentia Renewables

Traffic Survey Locations - NL DTI 2016

Pattern Argentia Renewables

SEM MAP ID: 238-005-GIS-123-Rev0

REVIEWED BY

APPROVED BY

NOTES:

Roads data sourced from National Topographic Service (CanVec) Traffic Survey Locations provided by NL Department of Transportation and Infrastructure

The Marine Atlantic ferry service connecting North Sydney, NS, and Argentia, NL, operates from June to September. According to the 2024 passenger ferry timetable, arrivals from North Sydney are set for 09:30 on Mondays, Thursdays, and Saturdays, with departures the same day at 17:00 (Marine Atlantic, 2024). Vehicle capacity depends on the type of vehicle transported, as large vehicles (e.g., transport trucks and recreational vehicles) use more space. Argentia Renewables will work with the POA and Marine Atlantic to plan Project activities to avoid effects on ferry-related road traffic during the Construction Phase.

4.2 Construction Phase Project Traffic Volume

Each turbine will be constructed in sequence, enabling staged delivery of components. The chosen wind turbines for the Project consist of 10 components, and it is expected that the entire components for two to three turbines can be delivered by sea per day. As shown in Table E-4.2-1, it is expected that delivery of all wind turbine components to each installation site will take a total of 460 trips. Wind turbine component specifications are provided in Table E-4.2.2-2. Assuming the Project employes two transports for blade delivery and two transports for other component delivery, each being able to conduct one round trip per day, the total cumulative number of days required for all deliveries will be 149.5 days over two construction seasons.

| Total Number of Wind | Total Number of | Daily Round Trips per |
|----------------------|-----------------|-----------------------|
| Turbine Sites | Components | Transport Vehicle |
| 46 | 460 | 1 |

| Table E-4.2-2 Wind Turbine C | Component Specifications | for the 6.8 MW Wind Turbine. |
|------------------------------|---------------------------------|------------------------------|
|------------------------------|---------------------------------|------------------------------|

| Turbine Component | Weight (mT) | Dimensions <u>(L x W x H) (m)</u> |
|------------------------------------|-------------|-----------------------------------|
| 1 x Nacelle (including drivetrain) | 87 | 18.3 x 4.2 x 4.4 |
| 1 x Hub | 35 | 4.7 x 4.4 x 4.1 |
| 3 x Blades | 29 | 80 x 4.4 x 3.8 |
| 5 x Tower Sections | 71 (max) | 27.0 m (Max length) |

4.3 Traffic Interactions Analysis

As presented in Figure E-4.3-1, E-4.3-2 and Table E-4.3-1, the Project can be divided into four working areas. Area 1 is the section of the POA containing wind turbines #1 through #7; Area 2 contains wind turbine locations #8 through #43; Area 3 has turbines #44 to #46; and Area 4 has turbine # 47.





| Pattern Argentia Renewables | FIGURE NUMBER: E - 4.3 - 1 | COORDINATE SYSTEM: NAD 1983 CSRS UTM Zone 22N | PREPARED BY: C. Bursey | DATE: 24/07/25 |
|--------------------------------|---|--|---------------------------|-------------------|
| | Pigure Title Project Infrastructure Area Map | NOTES: Proposed project infrastructure is considered preliminary and is subject to change. Roads data sourced from National Topographic Service (CanVec) | REVIEWED BY. | |
| | PROJECT TITLE Argentia Renewables | | S | em |

SEM MAP ID: 238-005-6IS-124-Rev1



| Project Work Areas | Area Location | Routes to Access | Wind Turbine Site Numbers |
|-----------------------|---|---|------------------------------|
| 1 | Within the POA | Internal roadway network within POA, north of the ferry terminal. | 1 - 7 |
| 2 | POA owned land, known as the Argentia Backlands | 200 m of route 100-11, and 2 km north of POA commercial area | 8 - 43 |
| 3 | South from POA, Moll Point area | 1 km eastbound on route 100 from POA, turnoff on Cooper Drive | 44 - 46 |
| 4 | Hilltop, west of the community of Freshwater | 3 km eastbound on route 100 from POA, Project created access route to hilltop west of community of Freshwater | 47 |

Table E-4.3-1 Project Area Locations by Turbine Site Number.

Within Area 1, minimal traffic disruption will be experienced as this area is north of the ferry terminal and is an industrial usage area with mimimal flowthrough traffic. Peak usage occurs during employee commutes associated with shift changes. Even during peak usage time, traffic numbers are expected to be light in the northwest area of the Argentia Peninsula, as this area is mostly used for laydown.

Area 2 contains the majority of the wind turbine locations and, will be accessed along a 200 m stretch of the main highway (Route 100-11) and 2 km of local roadways within the commercial park. As the area has additional access routes to the commercial park, public traffic can be controlled and diverted to other access routes without causing appreciable delays, even during peak traffic periods.

Areas 3 and 4 will be accessed from Route 100. Area 3 requires use of 1 km of Route 100, while Area 4 requires use of 3 km. This section of Route 100 is the primary access route to the POA and the seasonal Marine Atlantic ferry. Transportation of large loads will be scheduled to avoid the 12 hours per week of seasonal Marine Atlantic ferry traffic.

4.4 Operation and Maintenance Phase Project Traffic Volumes

During the Operations and Maintenance Phase of the Project, traffic volumes will be modest overall, while overweight/oversized transport will be minimal and will only be required on an as needed basis for repair or replacement of a major component.

With the exception of emergency repair/replacement activities, traffic will comprise of crew trucks and light vehicles either conducting site maintenance, inspections and monitoring, and security patrols. No special measures will be required during the Operation and Maintenance Phase to avoid interference with public or POA traffic.



4.5 Decommissioning and Rehabilitation Phase Project Traffic Volumes

Eventually the Project will be decommissioned, followed by site rehabilitation and restoration. This phase of the Project will ensure that the Project infrastructure and components will be properly and safely removed, and land disturbances rehabilitated. Part of this phase includes rehabilitation of roads and access routes, should alternate uses not be identified.

During the Decommissioning and Rehabilitation Phase the steps to achieve final closure will follow similar methods and routes as those employed during the Construction Phase. Cranes will be used to take down all components, and the same types of heavy transport vehicles will be used to transport the components to the POA. The priorities for disposal of recovered components will be ranked as resale/reuse, recycling, and finally disposal at an approved site.

5.0 Traffic Management Plan

This section presents the measures that will be implemented to ensure a safe working environment for all Project employees as well as the public. Traffic related mitigation measures will also ensure that Project activities will take place with minimal disruption to the public, local businesses, and the environment.

5.1 Driver Conditions

Employees and contractors who operate any motorized vehicle as part of this Project, including heavy equipment, will adhere to the following Policies:

- Ensure all licences and permits are up to date;
- Follow all vehicle and roadway rules and regulations;
- Ensure that vehicles are in good working order, especially with respect to emissions control devices;
- Respect the road space and its use by other drivers and pedestrians;
- Follow all designated traffic control measures, both inside and outside the Project access routes;
- Exercise courtesy towards others;
- Turn off all flashing and rotating warning light beacons when on public roadways, unless required;
- Maintain a safe following distance from other vehicles and avoid traveling in convoys, unless required; and
- Drive in full compliance with this Management Plan.



5.2 Traffic Control Measures

Traffic related control measures are presented within this section to ensure that all Project employees are informed of their legal responsibilities and are focused on the safety of the local public and general environmental awareness. All appropriate traffic control signage and controls will be in place as described by the Traffic Control Manual 2018 from the NLDTI.

During the traveling season, the Marine Atlantic ferry traffic creates surges of traffic traveling towards the Argentia Peninsula in late afternoons and in the opposite direction in the mornings for three days of the week during. Project employee-related traffic arrivals and departures will be scheduled to precede the existing morning peak hour and follow the existing afternoon peak hour.

As previously noted, movements of oversized and overweight loads will be limited in number and scheduled based on arrival of components to the POA. Given the requirement to access only short stretches of public roads, the Project oversized and overweight traffic will be scheduled to avoid known peak traffic periods. To ensure pedestrian safety, Argentia Renewables will require that all drivers be familiar with all Project rules and measures related to pedestrian safety.

5.3 Monitoring and Reporting

This section details the incident and complaint reporting process, and the process for Argentia Renewables to inform the local community and public users of work activities and schedules.

5.3.1 Incident and Complaint Reporting

Argentia Renewables will document incidents and complaints as per its complaint's resolution protocol outlined in the Public Participation Plan.

5.3.2 Local Notifications and Community Communications

The scheduling and notification of activities that will increase the traffic or affect traffic demands will be communicated with the local community as per the engagement and tools outlined in the Public Participation Plan.

Any maintenance or upgrading activity will be scheduled and conducted according to the appropriate federal, municipal, and provincial permits. Construction traffic notification signage will be erected in advance of the planned work. All signage will follow the *Traffic Control Manual* 2018 from the NLDTI.



Dusting and Noise Concerns 5.3.3

Noise and dust monitoring and mitigation measures will be implemented where required, as discussed in Chapter 4 of the Environmental Registration Document.

6.0 Training **Driver Education** 6.1

Driver education, encompassing driver safety training and updates to the TMP, plays a crucial role in enhancing both driver safety and the safety of the broader community. Through targeted efforts such as employer orientation programs, regularly held toolbox meetings, and informative safety briefing, drivers will be equipped with necessary knowledge and skills to navigate roadways safely. These efforts promote safety awareness among drivers and keep them updated on the latest developments and protocols in the TMP, helping to reduce risks and enhance safety.

Project staff, contractors, and visitors will be required to have appropriate vehicle and traffic training, along with specialized Project training encompassing environmental awareness, legal obligations, and traffic regulations briefings.

7.0 Emergency Contacts and Procedures

Table E-7.0-1 presents a summary of individuals and organizations in case of a traffic-based incident. A detailed list of all contact information is available in the Emergency Response Plan.

| Name | Position | Contact Number | | |
|--|----------------------------------|-----------------------|--|--|
| Joseph Card, CRSP | H&S Manager | 1-226-932-6042 | | |
| Mark Alderson | Director, Field Operations | 1-204-384-7000 | | |
| | Construction Foreman | | | |
| Anthony Jones | Environmental Manager | 1-289-962-7446 | | |
| | On-Site Environmental Contact | | | |
| Local Emergency Services | | | | |
| Organization | | Contact Number | | |
| Police – RCMP – Emergency | | 911 or 709-227-2000 | | |
| Occupational Health and Safety (OH&S) Division | | (709) 729-4444 (24hr) | | |
| Placentia Hospital | | 709-227-2061 | | |
| Placentia Emergency Department | | 709-227-2013 | | |
| Placentia Fire Department | | 709-227-2151 | | |

Table E-7.0-1 Argentia Renewables Contact Information.



| | 709-227-3200 |
|---|-----------------------------|
| Town of Placentia | 709-227-2151 |
| Marine Atlantic | 1-800-341-7981 |
| Port of Argentia | 709-227-5502 |
| Town of Fox Harbour | 709 227-2271 |
| Placentia Bay Veterinary Clinic, 295 Main Hwy, Bay Roberts, NL, A0A 1G0 | 709-786-1571 |
| PROVINCIAL RESOURCES | |
| Ambulance | 911 |
| Emergency Measures Organization | 709-229-3703 |
| Environment and Lands - Environment Officers | 709-729-2550 |
| Health Regional Office | 709-229-1551 |
| Regional Medical Health Officer | 709-229-1571 |
| Health and Comm. Services Placentia | 709-227-0130 |
| Works, Services and Transportation | |
| Freshwater – Placentia Hwy Depot | 709-227-1351 |
| Oil Spill Response (24 Hr.) | 1-800-563-9089 |
| FEDERAL RESOURCES | |
| Environment Canada | |
| General Weather Forecast | 709-772-5534 |
| Environmental Protection | 709-772-5585 |
| Canadian Coast Guard – St. John's | 709-772-5146 |
| General Inquiries | 709-772-5151 |
| Environmental Emergencies | 709-772-2083 |
| ADMINISTRATION CONTACTS | 8 |
| Port of Argentia | |
| General Manager | 1 |
| Adam Greene | 709-227-4653 (Cell) |
| | a.greene@portofargentia.ca |
| Port Operations Co-ordinator | |
| Blair McGrath | 709-227-1934 (Cell) |
| | 709-227-4702 (O) |
| | b.mcgrath@portofargentia.ca |
| HSEQ Coordinator | 1 |
| Jackie Jones | 709-682-3886 (Cell) |
| | j.jones@portotargenita.ca |



8.0 Plan Review and Updating

This document will be reviewed at least annually and revised/updated as required. Specifically, Plan revisions will be made when:

- New or revised approvals, permits, or license conditions are issued in relation to Traffic Management;
- Corrective or preventative measures are identified following incident investigations;
- Changes occur with Project plans in relation to traffic movement, equipment transportation and access; and
- An annual review of this document is completed.

9.0 References

- Highway Design and Construction Division (2018) Traffic Control Manual. Newfoundland and Labrador Department of Transportation and Infrastructure. <u>https://www.gov.nl.ca/ti/files/publications-</u> <u>traffic-control-2018.pdf</u>
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- Highway Design and Construction Division (2016). *Portable Counter Downloads-Region 1 Radar Counts 2016- 100-15 Int to Fox Hr-on route 100 south of fox harbour rd.* Newfoundland and Labrador Department of Transportation and Infrastructure.
- Highway Design and Construction Division (2016). *Portable Counter Downloads-Region 1 Radar Counts 2016- 100-20 Int to Ferndale-on route 100 south of ferndale rd.* Newfoundland and Labrador Department of Transportation and Infrastructure.
- Highway Design and Construction Division (2016). *Portable Counter Downloads-Region 1 Radar Counts 2016- 100-15 Int to Fox Hr-on fox harbour rd*. Newfoundland and Labrador Department of Transportation and Infrastructure.
- Iberdrola (2024). *Do you know Blade Lifter? The new transport system for wind turbine blades.* https://www.iberdrola.com/innovation/blade-lifter-wind-turbine-blades-transportation
- Marine Atlantic (2024). *Atlantic Vision Technical Data Sheet*. <u>https://www.marineatlantic.ca/onboard-experience/our-fleet/mv-atlantic-vision</u>



- Marine Atlantic (2024). Passenger Ferry Schedule. <u>https://www.marineatlantic.ca/sailing-</u> information/schedule? gl=1*12p0w9t* ga*NzY2OTIwNzYxLjE3MTA5MzI3MzQ.* ga Q966PPX TL4*MTcxMDk0MDM2OC4yLjEuMTcxMDk0MDY4OS41OC4wLjA.& ga=2.137656240.1892870 996.1710932734-766920761.1710932734
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