

Attachment 11

Bay d'Espoir Unit 8 FEED Report Introduction

AtkinsRéalis



AtkinsRéalis



FINAL REPORT

Newfoundland & Labrador Hydro

18-December-2024

BDE-AKR-40000-EN-TEN-0002-01 B0

699257-5000-40ER-0001 B0

BAY D'ESPOIR UNIT 8 FEED

DISCLAIMER

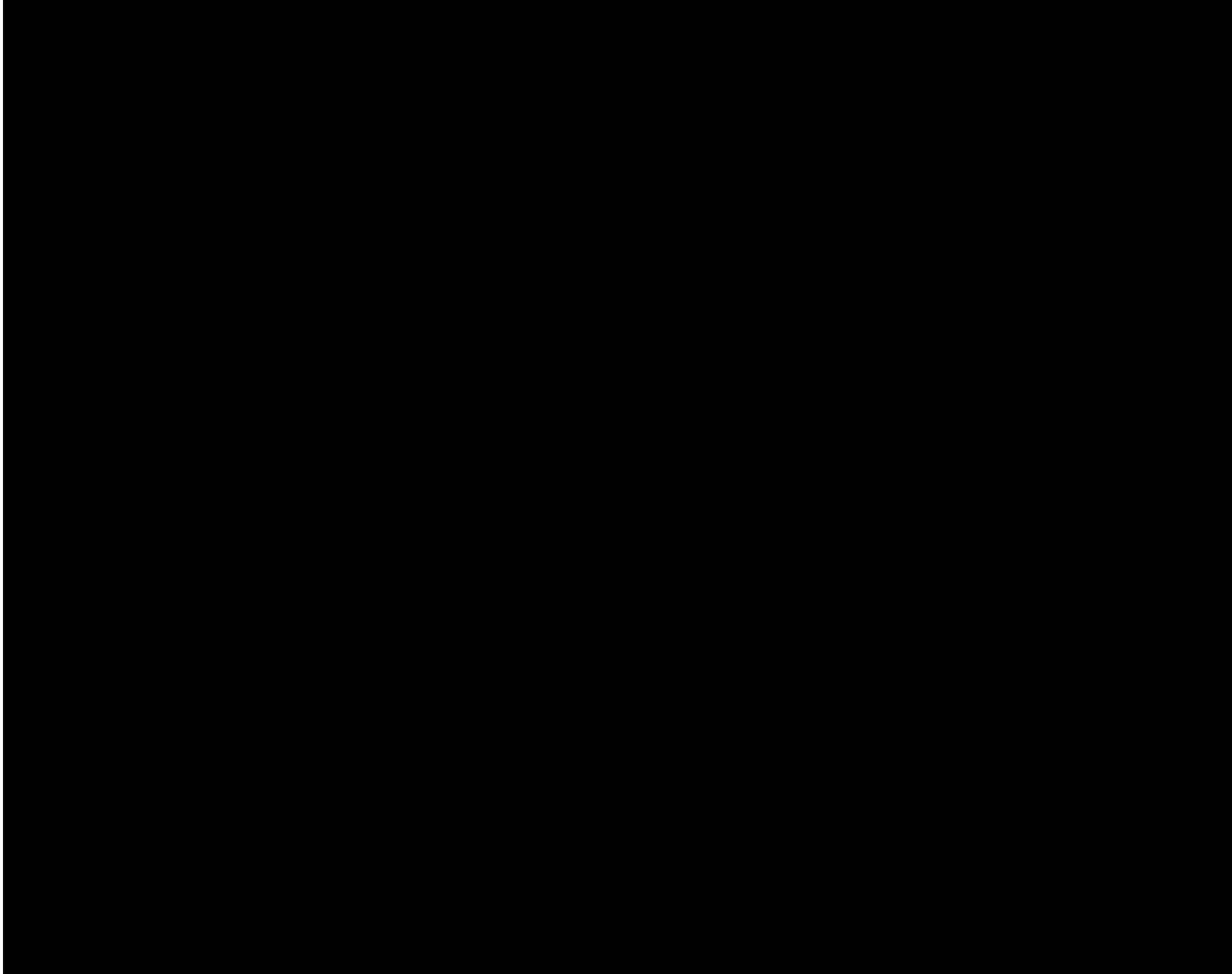
This report was prepared for Newfoundland and Labrador Hydro (“NL Hydro”) by AtkinsRéalis. It contains the expression of the professional judgement of AtkinsRéalis, and the information herein has been prepared for the specific purpose and use as outlined in the Contract Document 2023-94590-DS. It is meant to be read as a whole, and sections or parts thereof should thus not be read or relied upon out of context.

This Final FEED report has been prepared based on the available data, inputs, and conditions at the time of its creation. The report captures a specific window in time of information and reflects the understanding and analysis of that moment.



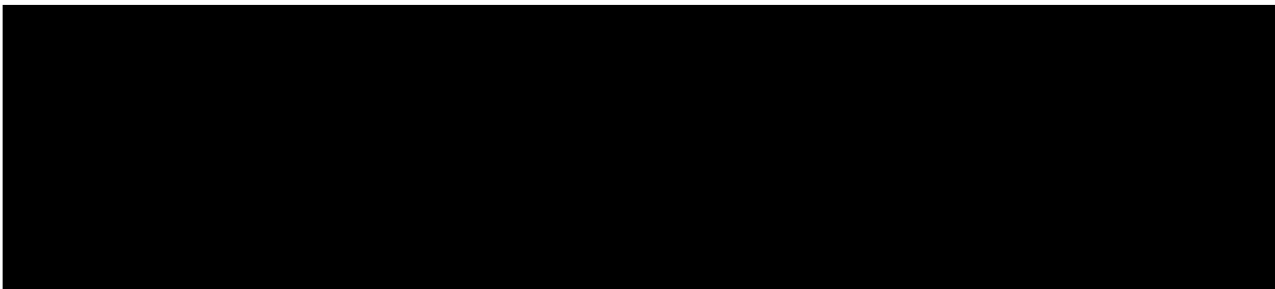
Signatures

Prepared by:



Verified by:

Approved by:



Notice

This document and its contents have been prepared and are intended solely as information for Newfoundland & Labrador Hydro and use in relation to Bay d’Espoir FEED Unit 8.

AtkinsRéalis assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

Document history

Document title: FINAL REPORT – Final Package

Rev	Purpose description	Originated	Checked	Reviewed	Authorized	Date



Contents

INTRODUCTION

1. INTRODUCTION.....	1
APPENDIX A. SCOPE OF WORK	A
APPENDIX B. OPTIONS ANALYSIS REPORT	B
APPENDIX C. CONCEPT DESIGN UPDATE REPORT	C
APPENDIX D. PATH OF CONSTRUCTION PLAN.....	D
APPENDIX E: FINAL COST ESTIMATE AND BASIS MONTE CARLO SIMULATION REPORT	E
APPENDIX F. SCHEDULE, AND SCHEDULE BASIS.....	F
APPENDIX G. DESIGN BASIS DOCUMENTS	G
APPENDIX H. RISK REGISTER, AND ASSUMPTION REGISTER.....	H
APPENDIX I. TERMINAL STATION NO. 2 (TS2) LIGHTNING PROTECTION STUDY.....	I
APPENDIX J. TECHNICAL & PERFORMANCE SPECIFICATIONS	J
APPENDIX K. MINUTES OF CONSTRUCTABILITY SESSIONS	K
APPENDIX L. DRAWINGS.....	L
APPENDIX M. 2D MODELLING OF TAILRACE MEMO, BATHYMETRY DATA COLLECTION SUMMARY MEMO	M



1. Introduction

This document is a compendium of the deliverables completed for the FEED stage of a new Unit 8 at Powerhouse 2 of the Bay d'Espoir Hydroelectric Generating Station. The individual documents are included in the Appendices, as noted in the following table, and are meant to be read as a whole.

Appendix	Content
A	Scope of Work
B	Options Analysis Report
C	Concept Update Design Report
D	Path of Construction Plan
E	Final Cost Estimate and Basis Monte Carlo Simulation Report
F	Schedule and Schedule Basis
G	Design Basis Documents
H	Risk Register and Assumptions Register
I	Terminal Station No.2 (TS2) Lightning Protection Study
J	Technical and Performance Specifications
K	Minutes of Constructability Sessions
L	Drawings
M	2D Tailrace Modelling to Evaluate to Evaluate Project Impact under Normal and Flood Conditions Memo Bathymetry Data Collection Summary Memo

