

1 Q. **Volume 1 (1st Revision), Chapter 3: Operations**

2 Does Hydro have a detailed plan associated with the Business Systems
3 Transformation Program? If so, please provide. If not, please explain the work
4 processes that justify the Business System Fee costs from 2016 to 2019 test year.
5 (Volume I (1st Revision), Chapter 3: Operations,
6 Page 3.41, Line 5, et. seq.)

7

8

9 A. The Business Systems Transformation Program is being managed by Nalcor Energy
10 as part of a shared program for all Nalcor companies including Hydro. There is a
11 detailed plan for the Program which includes three main projects:

- 12 1. Migrating the current Enterprise Resource Planning (ERP) system to JD
13 Edwards (JDE) EnterpriseOne (E1);
- 14 2. Upgrading the Planning, Budgeting, and Forecasting solution to Cognos TM1;
15 and
- 16 3. Implementing an Information Management (IM) Program.

17

- 18 1. Migrating the current Enterprise Resource Planning (ERP) system to JD Edwards
19 (JDE) EnterpriseOne (E1);

20 The foundation of the Program is to upgrade the organization's ERP system
21 from Oracle JDE World to Oracle JDE EnterpriseOne (E1). The upgrade will
22 provide enhancements for many areas of the business including Finance,
23 Customer Service, Human Resource Management, Supply Chain Management,
24 and Capital Asset Management. Figure 1 depicts the plan for the migration.

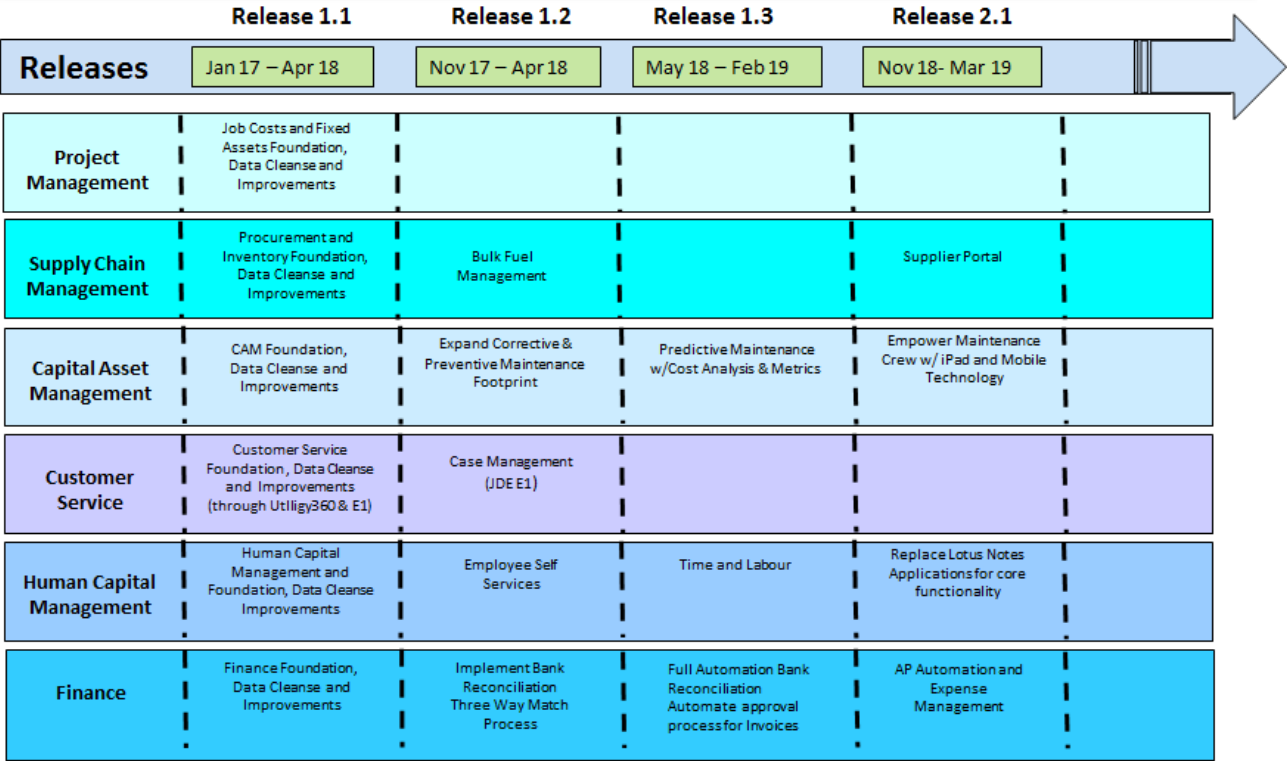


Figure 1 – Release Strategy for JD Edwards Migration Project

- 1
2. Upgrading the Planning, Budgeting, and Forecasting solution to Cognos TM1
- 2 The software solution Cognos TM1 is being implemented for Planning,
- 3 Budgeting, and Forecasting. The Cognos solution integrates with E1 resulting in
- 4 the standardization of data and reporting structures across systems. Figure 2
- 5 depicts the project plan.

	Release 1.1	Release 1.2	Release 1.3
Releases	Jan 18	Aug 18	Jan/Feb 19
Fixed Assets	<ul style="list-style-type: none"> Long Term Depreciation Projections, Including Average Service Life and Equal Life Group (NL Hydro) Will replace these activities currently completed in CAPM 		
Capital Projects		<ul style="list-style-type: none"> Capital Project Entry, to Align with the Existing Business Cycle to Allow Utilization for the 2020 Budget Year Currently completed in Excel Full replacement of CAPM 	
Overall Planning, Budgeting and Forecasting			<ul style="list-style-type: none"> Full Income Statement and Balance Sheet Budgeting and Forecasting, Including Capital Planning and Estimating Currently completed in Clarity and Excel

Figure 2 – Release Strategy for Cognos TM1 Upgrade

- 1 3. Implementing an Information Management (IM) Program
- 2 Hydro is a public body as defined in Section 2 of the *Management of*
- 3 *Information Act* ("the Act") and is legislatively mandated to manage, protect,
- 4 and securely dispose of its information records in accordance with the Act. This
- 5 includes records in any media type or format (e.g., electronic, paper, email,
- 6 texts). The IM Program includes:
- 7
 - 8 • IM Policy Development;
 - 9 • IM Advisory Services;
 - 10 • IM Risk Assessments;
 - 11 • IM Education and Awareness; and
 - 12 • IM Tools (e.g., Records Inventory, Classification and Retention Schedules, and Electronic Document Management Solution).

1 Figure 3 depicts the IM Program activities for 2017 and 2018.

INFORMATION MANAGEMENT (IM) PLAN 2017-2018		
	2017	2018
IM Foundations	Governance Model Policy Framework IM Corporate Policy	IM Program Plan (Annual) IM Engagement Model IM Policy Templates
IM Tools	Records Inventory Template CRIMS Assessment IM Classification for Administrative Records (High-Level) Priority Policies, Standards, Guidelines	Records Inventories (High-Level) Security Classification Framework IM Classification Plan for Administrative Records (Detailed) Priority Policies, Standards, Guidelines
IM Enablers	Approach for Implementation of a Document Management System IM Training Sessions	Implementation of a Document Management System IM Training Sessions Online IM Training
IM Management	IM Legal & Regulatory Framework (v.1.0) IM Policy Framework	IM Legal & Regulatory Framework (v.2.0)

Figure 3 – Information Management Program (2017-2018)

2 The detailed functionality which is being gained by Hydro for the Enterprise
 3 Resource Planning and Planning, Budgeting and Forecasting projects is included in
 4 NP-NLH-036, Attachment 1.

Business Systems Transformation

Functionality Enhancements

The tables below provide more detail on the functionality enhancements from the Business Systems Transformation project.

Table 1 – Functionality Enhancements from JD Edwards Migration Project

System Wide Functional Improvements	
<ul style="list-style-type: none"> • Enhanced search capability, web based interface • Personalized user screen by job role • Direct export of data to other formats (Excel/PDF) • Role based security • Enhanced data access through new embedded query tool • Reporting offered in Enterprise One provides out of the box and customizable reports that can be generated using real time system data • Linking/on screen access to other applications/web pages 	<ul style="list-style-type: none"> • Automated notifications based upon predefined criteria • Automated workflows for review and approval • Mobile system access and approvals • Reduced reliance on other systems/tools (Lotus Notes) • Use of process-based E1 pages and favorites, creating a user based customized view of the ERP • Real-time reporting through dashboards and watch lists • Ability to attach or link documents to transactions for viewing and access • Drill through capability from reporting (including dashboards) to underlying transactions
Capital Asset Management	
<ul style="list-style-type: none"> • Standardized asset and data management. Larger volumes of data in a standardized format will allow for more analysis • Real-time asset-based data readings to allow for Predictive maintenance • Cost of maintaining assets 	<ul style="list-style-type: none"> • Schedule and monitor maintenance activities, including predictive, preventive and corrective maintenance • Enhanced tracking of repair history for assets
Project Management (Fixed Assets and Job Cost)	
<p>Fixed Assets</p> <ul style="list-style-type: none"> • Define an appropriate asset structure for tracking asset costs • Track the full asset accounting lifecycle • Provide configurable journal entry screen with copy and paste functionality • Automated mass disposal • Fixed Asset creation with approval routing • Integration with equipment plant maintenance module as part of capital asset management • Support calculation of multiple depreciation methods including Equal Life Group, Straight Line and Capital Cost Allowance • Field level security 	<p>Job Cost</p> <ul style="list-style-type: none"> • Integrated with AP, AR, Contract Billing and Fixed Assets • Job status inquiry for general project health information • Dashboard functionality to drill back on all project transactions • Time schedules enables the scheduling of subtasks • Standardized operating projects
Human Capital Management	
<ul style="list-style-type: none"> • Comprehensive views of employee history • Automatic creation of organization charts • Wage and salary administration with the ability to select and process a group of employees for processing of pay grade salary changes, enhancement of automated calculations currently performed manually Lotus Notes application replacements 	<ul style="list-style-type: none"> • Self service functionality e.g. the updating of personal information • Role based security and auditing to secure sensitive employee data • Time entry enhancements Health and Safety integrated module in JDE E1

Finance	
<p>Accounts Payable</p> <ul style="list-style-type: none"> Automated three way matching of invoices, purchase orders, and receipts Setup of a single vendor with multiple sites Electronic attachment of receipts Expense Management module for purchase card transactions as well as expense claims Reoccurring and multi vouchers to reduce data entry Electronic Funds Transfer for US currency Automated approval process for Invoices <p>General Ledger</p> <ul style="list-style-type: none"> Automated account description pop-up Automated journal entry description field from prior description fields Ability to add attachments/link documents to journal entries Allocation feature allows for auto generation of some entries Revision of Chart of Accounts to permit natural roll up of costs Clean up and partial restructure Align account structure and ensure consistent roll up Automated Bank Reconciliation Consolidations performed within the ERP 	<p>Accounts Receivable</p> <ul style="list-style-type: none"> Automated e-mail of statements and invoices Automated account description pop-up Automated generation of invoice description field Ability to add attachments or link documents to invoice records Delinquency account processing Centralized area to track customer data and interactions Automated system notifications
Supply Chain Management (Procurement and Inventory)	
<ul style="list-style-type: none"> Automatically search for inventory items in multiple locations Support process improvements around receipting and issuance of inventory Request item additions electronically and route for approval Automated and centralized fuel management 	<ul style="list-style-type: none"> Online purchase requisitions and electronic workflow for automated approval of requisitions Generate a bill of materials which can be used on subsequent work orders
Customer Service (Utiligy 360 and Case Management in E1)	
<ul style="list-style-type: none"> Supports the Customer Service department's three year strategic plan Ability to electronically record all interactions with customers Step-by-step service wizard to create new customers Utility Collection Manager allows for reporting on all customer collections history 	<ul style="list-style-type: none"> Automated meter reading for data upload from hand held devices Data trending capability Rate management to ensure data integrity

Table 2 – Functionality that will be available in the Cognos TM1 software across all releases includes:

Fixed Assets	
<ul style="list-style-type: none"> • Long-term depreciation projections of current and projected assets, including projected retirements <ul style="list-style-type: none"> ○ 50+ years, by month, as required • Integration with JD Edwards EnterpriseOne for extraction of current Fixed Asset data into Cognos TM1: <ul style="list-style-type: none"> ○ Base Asset data – description, location, system, class, function, customer, location, etc. ○ Depreciation data - asset cost, service life, depreciation method, etc. 	<ul style="list-style-type: none"> • Reporting and data extraction to facilitate long term planning and Regulatory requirements: <ul style="list-style-type: none"> ○ Investment Evaluation ○ Cost of Service ○ Regulatory Reporting • Two straight line depreciation methodologies: <ul style="list-style-type: none"> ○ Average Service Life ○ Equal Life Group
Capital Projects	
<ul style="list-style-type: none"> • Ability of Project Estimators to prepare capital project estimates and related build up for all Nalcor Lines of Business in an integrated system, including: <ul style="list-style-type: none"> ○ Internal labour, by craft and home business unit ○ Equipment ○ Materials ○ Contract labour • Integration with JD Edwards for data, such as: <ul style="list-style-type: none"> ○ Master Data: Account and Corporate (Business Unit) structures 	<ul style="list-style-type: none"> • Ability to generate capital project proposals including detailed project cash flows, by account, by month, with supporting account buildup
Income Statement	
<ul style="list-style-type: none"> • Will result in the replacement of the current Clarity software tool used for budgeting and forecasting • Ability to utilize zero-based or escalated budgeting methodologies or a hybrid approach, by account or line of business • Income statement for each LOB at the account level, with supporting build up • Driver based budgeting and forecasting for select accounts • Control of and standardized utilization of Budget Assumptions <ul style="list-style-type: none"> ○ Salary and O&M Escalators ○ Foreign Exchange Rates ○ Oil Pricing 	<ul style="list-style-type: none"> • Ad-hoc and published report generation • Integration with JD Edwards, for extraction of data into Cognos TM1, including: <ul style="list-style-type: none"> ○ Master Data: Account and Corporate (Business Unit) structures ○ Transactional Data: Actual account balances, by month • Integration with JD Edwards for update with data generated in Cognos TM1, such as: <ul style="list-style-type: none"> ○ Transactional Data: Budget and Forecast account balances, by month • Integration with the capital budgeting and forecasting processes for automated entries for labour credits
Capital and Operating Projects	
<ul style="list-style-type: none"> • Replacement of the current custom built Capital Asset Projection Module (CAPM) tool and elimination of multiple Excel based templates • Ability to generate new projects (Business Units) both Capital and Operating for automated creation in JD Edwards • Ability to generate project specific Work Breakdown Structures (WBS) for automated creation in JD Edwards • Budgeting and Forecasting by project at the account level, with supporting build up • Driver based budgeting and forecasting for select accounts • Integration with the operating budgeting and forecasting processes for automated entries for labour credits • Integration with JD Edwards for extraction of data into Cognos TM1, such as Craft bill rates 	<ul style="list-style-type: none"> • Integration with FTE budgeting and forecasting for selection of resources from the resource complement, facilitating budgeting of internal labour and contract labour • What-if analysis, including for budget changes or project deferrals • Ad-hoc and published report generation • Integration with JD Edwards for update with data generated in Cognos TM1, such as: <ul style="list-style-type: none"> ○ Master Data: Project Work Breakdown Structures (WBS) and Business Units (project numbers) ○ Transactional Data: Budget and Forecast account balances, by month

Salary and Full Time Equivalency (FTE)	
<ul style="list-style-type: none"> • Budgeting and forecasting of the Salary range for each LOB at the account level, by month, with supporting build up • Restricted security access to salary and related data by business unit • Decomposition of the salary amount into: <ul style="list-style-type: none"> ○ Cost of Living ○ Merit ○ Progression ○ Front Line Supervisory (FLS) amount • Budgeting and forecasting of FTEs, hours by month, associated with positions defined in the salary build up • Vacancy tracking and reporting • Driver based budgeting and forecasting for select accounts • Ad-hoc and published report generation 	<ul style="list-style-type: none"> • Control of and standardized utilization of Budget Assumptions <ul style="list-style-type: none"> ○ Salary, cost of living, merit, etc. escalators and percentages • Integration with projects budgeting and forecasting for selection of the available resource complement • Integration with JD Edwards, for extraction of data into Cognos TM1, such as: <ul style="list-style-type: none"> ○ Master Data: Employee, FTE, position and job data ○ Transactional Data: Actual account balances, by month • Integration with JD Edwards for update with data generated in Cognos TM1, such as: <ul style="list-style-type: none"> ○ Master Data and Position Master - approved budgeted positions
Balance Sheet	
<ul style="list-style-type: none"> • Ability to budget and forecast a full Balance Sheet for each LOB, with update capability by each of the respective business unit owners • Cash Flow for each LOB • Data elements outside the income statement will be a manual input, with upload capability, such as from Excel • Income statement data will flow into the balance sheet • Integration with JD Edwards for update with data generated in Cognos TM1, such as: <ul style="list-style-type: none"> ○ Transactional Data – Budget and Forecast account balances, by month 	<ul style="list-style-type: none"> • Ad-hoc and published report generation • Elimination entries with ability to generate a consolidated Balance Sheet • Integration with JD Edwards, for extraction of data into Cognos TM1, such as: <ul style="list-style-type: none"> ○ Master Data – Account and Corporate (Business Unit) structures ○ Transactional Data – Actual account balances, by month