**Insurance Contract Liabilities:**

* Senior management commit the necessary resources to the processes associated with calculating insurance contract liabilities – staff have the skills and time to all the calculation and review of the liabilities.
* Staff responsible for calculating insurance contract liabilities are appropriately credentialed professionals.
* Staff participate in continuing professional development activities.
* Duties are segregated so that separate individuals are responsible for the primary analysis, technical review and supervisory peer review.
* Personnel responsible for calculating insurance contract liabilities are independent of the underwriting and pricing functions.
* There is a Chief Actuary who takes responsibility and ownership for the insurance contract liability values.
* The Chief Actuary reports to senior management and the Board of Directors on issues relating to insurance contract liabilities.
* Computer systems used to calculate insurance contract liabilities:
* Access to systems is restricted to authorized personnel
* Access security privileges are monitored on a quarterly basis.
* Authorized changes to computerized systems are made only after the changes have been fully tested.
* Use control totals to track that all information is fully processed.
* End-user controls are implemented over use of excel spreadsheet.
* Individuals are assigned the responsibility for each insurance contract liability models.
* Insurance contract liability models are documented to describe the methodology and assumptions used to calculate the liability.
* Personnel independent of the insurance contract liability calculations review the models to ensure that they comply with Company policies and industry standards.
* Individuals are assigned the responsibility to review financial statement disclosures to ensure that disclosures associated with processes undertaken to estimate insurance contract liabilities is understandable.
* Senior management review and sign-off on individual assumptions annually.
* Sensitivity analysis is performed on key assumptions each reporting period.
* Valuation data used for calculating insurance contract liabilities is reconciled to systems used to administer the insurance contracts each reporting period.
* Reasonability checks are performed on outputs from the insurance contract liability processes.
* Reasonability reviews of insurance contract liabilities are performed by senior management each reporting period.

**Equities:**

* Senior VP Investments is responsible to the development, maintenance and communication of the corporate policies and procedures for public equities.
* The Public equities policy reflects all requirements for current Canadian generally accepted accounting principles.
* All equity purchase recommendations are thoroughly researched prior to purchase are researched by treasury analysts to ensure that they align with corporate investment objectives.
* VP Investments will authorize the purchase and disposition of public equities.
* Investments will be classified at the time of acquisition.
* Custody of the public equities has been delegated to the Investment Division of a large national Canadian Bank (The Bank).
* The Bank also acts as the fund manager for the public equities.
* Confirmations are received from the Bank for all purchases and sales of public equities.
* Monthly statements are received from the Bank that detail the invested asset portfolio.
* Treasury analysts reconcile the company investment portfolio records to the monthly statements received from the Bank.
* At year-end the treasury analysts prepare journal entries to record fair market value adjustments.
* Journal entries for fair market value adjustments are approved by the VP investments.

**Allowances for Loan Losses:**

* The Company has an authorized Credit Granting policy in place.
* Senior Management and the Audit Committee of the Board of Directors review the Company’s compliance with and performance against, the policy.
* Periodic review of the policy is performed to ensure consistency with risk tolerances is performed by Senior Management and the Audit Committee.
* Policy provisions include:
* Appropriate review is made a customer requests credit to ensure that the customer meets the defined requirements necessary to be granted credit
* Definition of the credit exposure limits to single borrowers and groups of related borrowers.
* Concentration limits for borrowers in any on industry.
* At risk accounts are assigned to employees in the accounting department for monitoring purposes.
* Each borrower is assigned a default rating and the assigned rating is mapped to a probability of default estimate (PD) that represents a long-run average of one-year default likelihood.
* Default rates are based on the company’s internal default rate history for each rating category.
* Several different default estimation methodologies are used and the results across the different techniques are compared for reasonableness.
* Staff responsible for allowance for loan loss provision calculations are appropriately credentialed professionals.
* Staff participate in continuing professional development activities.
* Reasonability reviews of allowance for loan loss calculations are performed by Senior Management each quarter.

**Revenue from Contracts with Customers**

* The Company has adopted IFRS 15 Revenue from Contracts with Customers (“new revenue standard”) as issued in May 2014. In accordance with the transition provisions in IFRS 15 the new rules have been adopted using the modified retrospective method to those contracts which were not completed as of January 1, 2018
* The Company has included a framework for determining the nature, amount, and timing of revenue recognition, into its accounting policies. For its significant revenue streams including sale of products and equipment, sale of customer owned assets, and engineering services, the Company identified the impact of each of the five steps of the revenue standard compared to prior policies, concluding there were no significant differences.
* The company has approved the accounting policy for revenue recognition.
* A Senior Manager in the Finance Department has been assigned accountability for implementation of the policy.
* Policy provisions include:
* a single model for recognizing revenue from contracts with customers. This standard applies to all contracts with customers, with only some exceptions.
* revenue is to be recognized in a manner that depicts the transfer of promised goods or services to a customer and at an amount that reflects the consideration expected to be received in exchange for transferring those goods or services. This is achieved by applying the following five steps:

1. identify the contract with a customer
2. identify the performance obligations in the contract
3. determine the transaction price
4. allocate the transaction price to the performance obligations in the contract
5. recognize revenue when (or as) the entity satisfies a performance obligation.

* Long term contracts in the Transportation businesses can include machining and assembly for the automotive business, contracts for supply components for a customer’s future production levels. These long-term supply agreements may include mutually agreed price reductions over the life of the agreement.
* These contracts are entered into with a customer when the Company can identify each party’s rights and the contract has commercial substance, which generally is when the customer has made a firm volume commitment.
* A contract liability is recognized for the expected amount payable to customers due to these productivity charges, discounts, rebates and similar obligations. Productivity charges, rebates, and other similar obligations are classified as a variable consideration and measured using historical experience and forecasts of expected sales.
* Long term contracts for the sale of customer owned assets are entered into with customers to develop, manufacture, and fabricate customer owned assets used for the purposes of parts production.
* Revenue is recognized when control of the asset has transferred to the customer, which occurs when the asset is substantially complete and the customer approves the initial production sample.
* Payment is typically made through a lump-sum payment, however, milestone payments throughout the asset fabrication process or amortization over parts production are sometimes agreed to. Payments made in advance of transfer of control are recorded as a contract liability and recognized as revenue once control has transferred
* Long Term contracts for Engineering services are signed with customers to design and develop a product or process using advanced engineering.
* Revenue is recognized, for contracts that qualify as a sale of service, as or when the service is being rendered.
* Revenue recognized over time is generally determined based on the proportion of accumulated expenditures to date as compared to total anticipated expenditures as this depicts the progress towards completion of the service.
* Payments made in advance of the service being rendered are recorded as a contract liability and recognized as revenue as the service is performed. Revenue from these sales is recognized based on the transaction price specified in the purchase order and corresponds to the invoice amount. The invoice amount represents the standalone selling price of engineering services, which is consistent with industry practice.
* Staff responsible for recognizing contract liabilities and the release of revenue from contract liabilities each year (2018 $38 million dollars of contract liabilities were released into revenue and at year end approximately contract liabilities approximates $130,903 million) are appropriately credentialed professionals.
* Staff participate in continuing professional development activities.
* Reasonability reviews of contract revenue calculations are performed by Senior Management each quarter.
* All customers are assessed for financial stability before contracts are signed.
* Acceptance of new contracts must be approved by senior sales management personnel.
* All contracts are assigned to a relationship manager within the sales department.

**Research & Development:**

* The Company has an authorized Research and Development policy in place.
* Senior Management and the Audit Committee of the Board of Directors review the Company’s compliance with and performance against, the policy.
* Periodic review of the policy is performed to ensure consistency with risk tolerances is performed by Senior Management and the Audit Committee.
* Management has established and authorized strategic business objectives.
* Policy provisions include:
* All product development and research activities are assessed to determine that they align with strategic business objectives.
* All product development and research activities are assessed to determine that valid and justified before the initiative approved.
* Budgets are established for all product development and research activities.
* Staff monitor budgets are investigate budget variances.
* Research and Development Research costs are expensed as incurred.
* The accounting policy for Capitalization identifies the required criteria that must be met to capitalize development costs. The capitalized development costs are accounted for as intangible assets.
* Product development costs are amortized on the Unit of production basis
* Amortization methods are reviewed, and adjusted if appropriate, at the end of each reporting cycle.
* Staff responsible for capitalization decisions and amortization calculations are appropriately credentialed professionals.
* Staff participate in continuing professional development activities.
* Reasonability reviews of amortization calculations are performed by Senior Management each quarter.

**Redeemable Financial Instruments:**

* The Bank has a policy in place to manage capital the policy reflects the capital requirement guidelines established by the Office of the Superintendent of Financial Institutions of Canada (OSFI). The OSFI capital guidelines are based on the international Basel Committee on Banking Supervision framework entitled Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems (“Basel III”)
* Senior Management and the Audit Committee of the Board of Directors review the Company’s compliance with and performance against, the policy.
* Periodic review of the policy is performed to ensure consistency with risk tolerances is performed by Senior Management and the Audit Committee.
* The Company is required to comply with regulatory requirements for capital associated with the for a federally chartered Schedule I bank.
* The Bank has various capital policies and procedures and controls, including an Internal Capital Adequacy Assessment Process (“ICAAP”), which it utilizes to achieve its goals and objectives.
* Accountability for the Bank to comply with all regulatory capital guidelines established by OSFI, its internal targets as determined by its ICAAP and all financial covenants under its bank credit agreement and note purchase facilities has been assigned to a member of Senior Management.
* Accountability for the monitoring and valuation of the redeemable financial instrument has been assigned to a member of Senior Management. The Redeemable Financial Instrument transaction with the Bank of Nova Scotia (Scotiabank) is a key capital management strategy. The agreement provides for the Bank of Nova Scotia to acquire a 20.0% interest. In conjunction with the transaction, Scotiabank was provided an option to sell and require the Company to purchase all of the interest owned by Scotiabank at any time during the six-month period following the tenth anniversary of the transaction. The purchase price will be based on the fair value of the Financial Services business and Scotiabank’s proportionate interest in the Financial Services business, at that time.
* The redeemable financial instrument is measured at fair value with changes in fair value recorded in net income for the period in which they arise. Fair value measurements of the redeemable financial instrument are calculated based on a discounted cash flow analysis using normalized earnings attributable to the Financial Services business, adjusted for any undistributed earnings and Scotiabank’s proportionate interest in the business.
* The Company uses a fair value hierarchy to categorize the inputs used to measure the fair value of financial assets and financial liabilities, the levels of which are: Level 1, Level and Level 3 - Inputs are not based on observable market data.
* The Company estimates future normalized earnings based on the most recent actual results. The earnings are then forecast over a period of up to five years, considering a terminal value calculated by discounting the final year in perpetuity.
* The growth rate applied to the terminal value is based on an industry-based estimate of the Financial Services business. The discount rate reflects the cost of equity of the Financial Services business and is based on expected market rates adjusted to reflect the risk profile of the business.
* The fair value measurement is performed by treasury department staff quarterly using internal estimates and judgment supplemented by input from a third party, as required. This recurring fair value measurement is categorized within Level 3 of the fair value hierarchy.
* Reasonability reviews of fair value calculations are performed by Senior Management each quarter.

**Depletion, Depreciation and Amortization:**

* The company has developed and approved an accounting policy for depletion, depreciation and amortization.
* A Senior Manager in the Finance Department has been assigned accountability for implementation of the policy.
* Policy provisions include:
* Oil and gas reserves are evaluated internally and audited by independent qualified reserve engineers. Estimates are based on projected future rates of production, estimated commodity prices, engineering data and the timing of future expenditures, all of which are subject to uncertainty.
* Depletion, depreciation and amortization rates for all capitalized costs associated with the Company’s activities are reviewed at least annually, or when events or conditions occur that impact capitalized costs, reserves and estimated service lives.
* Oil and gas properties are depleted on a unit-of-production basis over the proved developed reserves of the particular field, except in the case of assets whose useful life is shorter or longer than the lifetime of the proved developed reserves of that field, in which case the straight-line method or a unit-of-production method based on total proved plus probable reserves is applied.
* Depreciation for substantially all other property, plant and equipment is provided using the straight-line method based on the estimated useful lives of assets, which range from five to forty-five years, less any estimated residual value. The useful lives of assets are estimated based upon the period the asset is expected to be available for use by the Company. Residual values are based upon the estimated amount that would be obtained on disposal, net of any costs associated with the disposal.
* Other property, plant and equipment held under finance leases are depreciated over the shorter of the lease term and the estimated useful life of the asset.
* The costs of major inspection, overhaul and turnaround activities that are capitalized are depreciated on a straight-line basis over the period to the next scheduled activity, which varies from two to five years.
* Staff responsible for calculating reserves and units of production are appropriately credentialed professionals.
* Staff participate in continuing professional development activities.
* Reasonability reviews of depletion/depreciation calculations are performed by Senior Management each quarter.

**Exploration and Evaluation Costs**

* The Company has a policy in place to manage the determination of exploration and evaluation costs.
* Senior Management and the Audit Committee of the Board of Directors review the Company’s compliance with and performance against, the policy.
* Periodic review of the policy is performed to ensure consistency with risk tolerances is performed by Senior Management and the Audit Committee.
* The application of the Company’s accounting policy for exploration and evaluation costs requires judgment in determining whether it is likely that future economic benefit exists when activities have not reached a stage where technical feasibility and commercial viability can be reasonably determined. Judgments may change as new information becomes available
* Policy provisions include:
* The accounting treatment of costs incurred for oil and natural gas exploration, evaluation and development are determined by the classification of the underlying activities as either exploratory or developmental.
* Exploration activities can fluctuate from year to year, due to such factors as the level of exploratory spending, the level of risk sharing with third parties participating in exploratory drilling and the degree of risk associated with drilling in particular areas.
* Pre-license costs and geological and geophysical costs associated with exploration activities are expensed in the period incurred.
* Costs incurred after the legal right to explore an area has been obtained and before technical feasibility and commercial viability of the area have been established are capitalized as exploration and evaluation assets. These costs include costs to acquire acreage and exploration rights, legal and other professional fees and land brokerage fees.
* Costs directly associated with an exploration well are initially capitalized as exploration and evaluation assets until the drilling of the well is complete and the results have been evaluated.
* If extractable hydrocarbons are found and are likely to be developed commercially, but are subject to further appraisal activity, which may include the drilling of wells, the costs continue to be carried as an exploration and evaluation asset while sufficient and continued progress is made in assessing the commercial viability of the hydrocarbons.
* Exploration and evaluation costs are excluded from costs subject to depletion until technical feasibility and commercial viability is assessed or production commences. This decision considers several factors, including the existence of reserves, establishing commercial and technical feasibility and whether the asset can be developed using a proved development concept and has received internal approval. Upon the determination of technical feasibility and commercial viability, capitalized exploration and evaluation assets are then transferred to property, plant and equipment.
* All such carried costs are subject to technical, commercial and management review, as well as review for impairment indicators, at least every reporting period to confirm the continued intent to develop or otherwise extract value from the discovery.
* These costs are also tested for impairment when transferred to property, plant and equipment.
* If their value is impaired. Impairment is charged directly to net earnings.
* Expenditures related to wells that do not find reserves or where no future activity is planned are expensed as exploration and evaluation expenses.
* Staff responsible for calculating insurance contract liabilities are appropriately credentialed professionals.
* Staff participate in continuing professional development activities.
* Reasonability reviews of depletion/depreciation calculations are performed by Senior Management each quarter.