

**ALBERTA NATURAL GAS ROYALTY
TABLE OF CONTENTS**

Chapter I - Introduction

Ch I - Section

| | | |
|----------|---|-----|
| 1 | Principles and Procedures Manual Overview | |
| 1.1 | Authority and Scope | 1-1 |
| 1.2 | Purpose and Use..... | 1-2 |
| 1.3 | Maintenance and Distribution..... | 1-2 |
| 2 | Executive Overview | |
| 2.1 | Background..... | 2-1 |
| 2.2 | Synopsis of Business Change | 2-1 |
| 3 | Alberta Natural Gas Royalty Process in Summary | |
| 3.1 | Overview..... | 3-1 |
| 3.2 | Industry Reporting to the Department | 3-1 |
| 3.3 | Crown Royalty Monthly Invoice | 3-3 |

Chapter II – Principles

Ch II - Section

| | | |
|----------|--|------|
| 1 | Alberta’s Royalty Share of Gas and Gas Products | |
| 1.1 | Crown Ownership of Natural Gas..... | 1-1 |
| 1.2 | Crown Royalty Share of Natural Gas | 1-1 |
| 1.2.1 | Point of Determination..... | 1-1 |
| 1.2.2 | Crown’s Royalty Share..... | 1-2 |
| 1.3 | Responsibility to Account for Natural Gas..... | 1-3 |
| 1.4 | Allocating Gas and Gas Product Ownership..... | 1-3 |
| 1.5 | Establishing the Crown Interest Share..... | 1-4 |
| 1.6 | Responsibility to Register Well/Well Group/Unit/Injection Scheme and Facilities..... | 1-5 |
| 1.6.1 | Well/Well Group/Unit/Injection Scheme..... | 1-5 |
| 1.6.2 | Facility Operator Changes | 1-6 |
| 1.6.3 | Out of Province Facilities | 1-6 |
| 1.7 | Transactions Which Trigger Crown Royalty..... | 1-6 |
| 1.8 | Responsibility for the Crown Royalty Share | 1-7 |
| 1.9 | Crown Royalty Rate for Raw Gas and Residue Gas..... | 1-8 |
| 1.9.1 | Calculation Criteria..... | 1-8 |
| 1.9.2 | Vintage..... | 1-9 |
| 1.10 | Crown Royalty Rate for Methane ISC (C1-IC) | 1-9 |
| 1.10.1 | Methane ISC Par Price and Select Prices..... | 1-10 |
| 1.10.2 | Methane ISC Vintage..... | 1-10 |
| 1.10.3 | Old Methane ISC Royalty Rate (C1-IC)..... | 1-10 |
| 1.10.4 | New Methane ISC Royalty Rate (C1-IC) | 1-11 |
| 1.10.5 | Low Productivity Well Allowance | 1-11 |
| 1.11 | Crown Royalty Rate for Ethane..... | 1-12 |
| 1.11.1 | Calculation Criteria..... | 1-12 |
| 1.11.2 | Ethane Par Price and Select Prices..... | 1-12 |
| 1.11.3 | Ethane Vintage..... | 1-13 |
| 1.11.4 | Old Ethane Royalty Rate | 1-13 |
| 1.11.5 | New Ethane Royalty Rate..... | 1-13 |
| 1.11.6 | Low Productivity Well Allowance | 1-14 |

Ch II – Section

| | | |
|----------|---|------|
| 1 | 1.12 Crown Royalty Rate for Propane..... | 1-15 |
| | 1.12.1 Calculation Criteria..... | 1-15 |
| | 1.12.2 Propane Par Price and Select Prices..... | 1-15 |
| | 1.12.3 Propane Vintage..... | 1-15 |
| | 1.12.4 Propane Royalty Rate..... | 1-15 |
| | 1.13 Crown Royalty for Butanes..... | 1-16 |
| | 1.13.1 Calculation Criteria..... | 1-16 |
| | 1.13.2 Butanes Par Price and Select Prices..... | 1-16 |
| | 1.13.3 Butanes Vintage..... | 1-16 |
| | 1.13.4 Butanes Royalty Rate..... | 1-17 |
| | 1.14 Crown Royalty Rate for Pentanes-Plus..... | 1-17 |
| | 1.14.1 Pentanes Par Price, Select Price and Royalty Factors..... | 1-17 |
| | 1.14.2 Pentanes-Plus Vintage..... | 1-18 |
| | 1.14.3 Old Pentanes-Plus Royalty Rate..... | 1-18 |
| | 1.14.4 New Pentanes-Plus Royalty Rate..... | 1-18 |
| | 1.15 Crown Royalty Rate for Sulphur..... | 1-19 |
| | 1.16 Crown Royalty Rate for Other Products..... | 1-19 |
| 2 | Exemptions, Waivers and Other Royalty Reductions | |
| | 2.1 Crown Royalty Holidays..... | 2-1 |
| | 2.1.1 Deep Gas Royalty Holiday..... | 2-1 |
| | 2.1.2 Otherwise Flared Solution Gas Royalty Waiver Program (OFSG)..... | 2-1 |
| | 2.1.3 Energy Efficiency Credit Program (EECP)..... | 2-2 |
| | 2.2 Raw Gas and Residue Gas Consumed..... | 2-2 |
| | 2.2.1 Gas Consumed in Gas Compressing, Gathering and Processing..... | 2-2 |
| | 2.2.2 Gas Consumed in Drilling and Production..... | 2-2 |
| | 2.2.3 Gas Consumed in Oil Sands Schemes and Experimental Oil Projects..... | 2-2 |
| | 2.3 Injected Gas and Gas Products..... | 2-2 |
| | 2.3.1 Injected Schemes Eligible for Crown Royalty Credit..... | 2-2 |
| | 2.3.2 Commercial Storage Schemes..... | 2-3 |
| | 2.3.3 Responsibility to Account for Injected Gas and Gas Products..... | 2-5 |
| 3 | Valuation | |
| | 3.1 Valuing Crown Share of Raw Gas, Residue Gas and Ethane..... | 3-1 |
| | 3.1.1 Royalty Client’s Election of Valuation Method..... | 3-1 |
| | 3.2 Reference Price Method..... | 3-2 |
| | 3.2.1 Reference Price Method - Valuing Residue Gas..... | 3-2 |
| | 3.2.2 Reference Price Method - Valuing Raw Gas..... | 3-2 |
| | 3.3 Gas Reference Price Method-Grandfathered Co-Generation and Long-term Contracts..... | 3-3 |
| | 3.4 Gas Corporate Average Price (CAP) Method..... | 3-4 |
| | 3.4.1 Minimum Price for the Gas Corporate Average Price..... | 3-4 |
| | 3.4.2 Eligibility Criteria Required for Using the Gas Corporate Average Price..... | 3-4 |
| | 3.4.3 Maintaining Eligibility to Use the Gas Corporate Average Price..... | 3-5 |
| | 3.4.4 Sales to Associates to Qualify for Valuation at the Reference Price Method..... | 3-6 |
| | 3.4.5 Audit Access to Associates of Clients Using the Gas CAP..... | 3-6 |
| | 3.4.6 Including Non-Alberta Sourced Gas in the Gas Corporate Average Price Method..... | 3-7 |
| | 3.5 Valuing Gas Products..... | 3-7 |
| | 3.5.1 Valuing Crown Share of Ethane..... | 3-7 |
| | 3.5.2 Propane and Butanes..... | 3-7 |
| | 3.5.3 Valuing Crown Share of Pentanes-Plus..... | 3-8 |
| | 3.5.4 Valuing Crown Share of Sulphur..... | 3-8 |

Ch II - Section

| | | |
|----------|--|-----|
| 4 | Alberta’s Royalty Share of Cost Allowances | |
| 4.1 | Overview | 4-1 |
| 4.2 | Allowable Cost Restriction | 4-2 |
| 5 | Other Programs Administered with Natural Gas Royalty | |
| 5.1 | Field Condensate Royalty | 5-1 |
| 5.2 | Sulphur Emission Control Assistance Program (SECAP) | 5-1 |
| 5.2.1 | Eligibility | 5-2 |
| 5.2.2 | Benefits | 5-2 |
| 5.2.3 | Limitation on Benefits | 5-3 |
| 6 | Levying and Collecting Natural Gas Royalty | |
| 6.1 | Royalty Client Accounts | 6-1 |
| 6.2 | Monthly Statement / Invoice Package | 6-1 |
| 6.2.1 | Statement of Account, Invoice and Crown Royalty Detail Summary Redesign | 6-2 |
| 6.3 | Monthly Royalty Invoice and Payment | 6-2 |
| 6.4 | Royalty Deposit Account | 6-2 |
| 6.4.1 | Royalty Deposit Calculation | 6-3 |
| 6.5 | Interest Receivable and Payable | 6-4 |
| 6.6 | Interest on Prior Adjustments | 6-5 |
| 6.7 | Application of Payments to Royalty Client Revenue Accounts | 6-5 |
| 6.8 | Collecting Outstanding Accounts | 6-6 |
| 6.9 | Determining Leaseholder Liability | 6-6 |
| 7 | Enforcing Compliance with Legislation and Policy | |
| 7.1 | Overview | 7-1 |
| 7.2 | Assessments and Levy of Reporting Discrepancies | 7-1 |
| 7.3 | Late Filing Penalties | 7-2 |
| 7.4 | Penalties on Inaccurate Statements in a Required Report | 7-3 |
| 7.5 | Close-Out for Operations | 7-4 |
| 7.6 | Statute Barred | 7-4 |
| 8 | Rights and Assurances of Royalty Clients | |
| 8.1 | Audits of Department Calculation of Royalty Variables | 8-1 |
| 8.2 | Disposition of Errors Discovered in an Independent Audit or Internally by the Department | 8-2 |
| 9 | Advance Rulings and Appeals | |
| 9.1 | Advance Ruling Process | 9-1 |
| 9.1.1 | Basic Concepts | 9-1 |
| 9.1.2 | Request for an Advance Ruling | 9-1 |
| 9.1.3 | Statement of Issues | 9-1 |
| 9.1.4 | Statement of Facts | 9-2 |
| 9.1.5 | Statement of Purpose | 9-2 |
| 9.1.6 | Royalty Client’s Analysis | 9-2 |
| 9.1.7 | Initial Review | 9-2 |
| 9.1.8 | Withdrawal of a Request | 9-2 |
| 9.1.9 | Processing a Request | 9-2 |
| 9.1.10 | Advance Rulings Ceasing to Have Effect | 9-3 |
| 9.2 | Appeals Process | 9-3 |
| 9.2.1 | Attempts to Resolve a Disagreement | 9-3 |

Ch II – Section

| | | |
|-----------|--|------|
| 9 | 9.2.2 Notice of Appeal | 9-4 |
| | 9.2.3 Information Required in a Notice of Appeal | 9-4 |
| | 9.2.4 Review of a Notice of Appeal..... | 9-4 |
| | 9.2.5 Ruling in Respect of a Notice of Appeal | 9-5 |
| | | |
| 10 | Amalgamations and Consolidations | |
| | 10.1 Amalgamations (Mergers) | 10-1 |
| | 10.1.1 Reporting | 10-1 |
| | 10.1.2 Valuation..... | 10-1 |
| | 10.1.3 VA2, VA3 and VA4 Forms | 10-1 |
| | 10.1.4 Allowable Costs..... | 10-2 |
| | 10.1.4.1 CERR for the Amalgamation Year | 10-2 |
| | 10.1.4.2 CERR for the Post-Amalgamation Years | 10-2 |
| | 10.2 Invoice Consolidations..... | 10-3 |
| | 10.2.1 Reporting | 10-3 |
| | 10.2.2 Valuation..... | 10-3 |
| | 10.2.3 VA2, VA3 and VA4 Forms | 10-3 |
| | 10.2.4 Allowable Costs..... | 10-4 |
| | 10.2.4.1 CERR for the Consolidation Year | 10-4 |
| | 10.2.4.2 CERR for the Post-Consolidation Years..... | 10-4 |
| | 10.2.5 Consolidation Termination | 10-5 |

Chapter III - Procedures

Ch III - Section

| | | |
|----------|--|------|
| 1 | Valuing Raw Gas and Residue Gas (Pricing Calculation) | |
| | 1.1 Raw Gas and Residue Gas Valuation | 1-1 |
| | 1.1.1 Raw Gas..... | 1-1 |
| | 1.1.2 Residue Gas | 1-1 |
| | 1.2 Facility Average Reference Price (FAP) | 1-1 |
| | 1.3 Calculation of the Gas Reference Price | 1-2 |
| | 1.3.1 Weighted Average Price of Alberta Gas..... | 1-3 |
| | 1.3.2 Transportation Cost Allowance | 1-5 |
| | 1.3.3 Valuation Point Adjustment (VPA) and Aggregator Overhead Marketing and Administration Charges (OMAC) Adjustment | 1-5 |
| | 1.3.4 Pipeline Fuel/Loss Allowance | 1-6 |
| | 1.3.5 Adjustment for Prior Period Amendments..... | 1-6 |
| | 1.4 ISC Reference Prices | 1-6 |
| | 1.5 Facility Average Transportation Allowances | 1-7 |
| | 1.6 Calculation of the Grandfathered Price..... | 1-9 |
| | 1.7 Calculation of the Gas Corporate Average Price | 1-10 |
| | 1.7.1 Plant Gate Netback Value | 1-11 |
| | 1.7.2 Sales to Associates Valued at the Associate’s CAP | 1-12 |
| | 1.7.3 Minimum Price for the Gas Corporate Average Price..... | 1-13 |
| | 1.7.4 Correcting the CAP for Adjustments to Sales Proceeds or Costs..... | 1-13 |
| | 1.8 Monthly Gas Corporate Average Price Estimate | 1-14 |
| | 1.8.1 Calculation of the Monthly CAP Estimate | 1-14 |

Ch III - Section

| | | |
|----------|--|------|
| 2 | Valuing Gas Products | |
| 2.1 | Valuing Crown Share of Ethane | 2-1 |
| 2.2 | Valuing Crown Share of Propane and Butane | 2-1 |
| 2.2.1 | Valuation Criteria..... | 2-1 |
| 2.2.2 | Propane and Butanes Reference Prices..... | 2-1 |
| 2.2.3 | Propane and Butanes Floor Prices | 2-2 |
| 2.3 | Valuing Crown Share Pentanes Plus..... | 2-3 |
| 2.3.1 | Valuation Criteria..... | 2-3 |
| 2.3.2 | Pentanes Reference Price..... | 2-3 |
| 2.4 | Allowances Deducted from Propane, Butanes and Pentanes Reference Prices..... | 2-4 |
| 2.4.1 | Regional Transportation Allowances..... | 2-4 |
| 2.4.2 | Fractionation Allowance..... | 2-6 |
| 2.4.3 | Special Pentanes Processing Allowance..... | 2-7 |
| 2.5 | Valuing Sulphur..... | 2-7 |
| 2.5.1 | Monthly Reporting..... | 2-7 |
| 2.5.1.1 | Monthly Sulphur Corporate Average Price Calculation..... | 2-8 |
| 2.5.1.2 | Monthly Sulphur Default Price Calculation | 2-9 |
| 2.5.2 | Annual Reporting..... | 2-9 |
| 2.5.2.1 | Annual Sulphur Corporate Average Price Calculation..... | 2-10 |
| 2.5.2.2 | Annual Sulphur Default Price Calculation | 2-11 |
| 2.6 | Valuing Other Gas Products | 2-11 |
| 3 | Alberta’s Royalty Share of Cost Allowances | |
| 3.1 | Crown Share of Cost Allowances..... | 3-1 |
| 3.1.1 | Monthly Calculation | 3-1 |
| 3.2 | Adding or Amending Monthly Crown Share of Cost Allowance Estimates | 3-1 |
| 3.2.1 | Annual Adjustment from Estimate to Actual..... | 3-3 |
| 3.3 | Facility Cost Centre | 3-3 |
| 3.3.1 | Facility Cost Centre Accountability..... | 3-4 |
| 3.4 | Calculating Annual Allowable Capital Costs | 3-5 |
| 3.5 | Calculating Annual Capital Cost Allowance | 3-6 |
| 3.6 | Custom Processing Adjustment to Capital Cost Allowance..... | 3-9 |
| 3.7 | Capital Cost Allowance Adjustment..... | 3-10 |
| 3.8 | Re-Allocation of Capital cost Allowance | 3-11 |
| 3.9 | Calculating Annual Unit Operating Costs | 3-11 |
| 3.10 | Annual Allowable Operating Costs | 3-12 |
| 3.11 | Calculating Crown Share of Operating Cost Allowances..... | 3-12 |
| 3.12 | Unit Operating Cost Rates | 3-12 |
| 3.12.1 | Energy Adjusted Gas Equivalent Volume | 3-13 |
| 3.13 | Calculating Unit Operating Cost Rates..... | 3-14 |
| 3.13.1 | Designated Facility Rates | 3-14 |
| 3.13.2 | Plant Type Rates | 3-17 |
| 3.14 | Classification of a New EUB Facility..... | 3-19 |
| 3.14.1 | Revising the Classification of an EUB Facility | 3-20 |
| 3.15 | Delayed Unit Operating Cost Rates..... | 3-21 |
| 3.16 | Calculating Annual Custom Processing Cost Allowance..... | 3-21 |
| 3.16.1 | Allowable Custom Processing Cost Allowance..... | 3-21 |
| 3.16.2 | Custom Processing Fees for 100% Freehold Royalty Clients | 3-22 |
| 3.16.3 | Eligible Custom Processing Fees..... | 3-23 |
| 3.16.4 | Allowable Operating Cost on Custom Processed Gas and Gas Products | 3-24 |
| 3.17 | Corporate Effective Royalty Rate (CERR)..... | 3-26 |

Ch III - Section

| | | |
|----------|--|------|
| 4 | Other Programs Administered with Natural Gas Royalty | |
| 4.1 | Valuing and Reporting Field Condensate | 4-1 |
| 4.1.2 | Allowable Costs for Field Condensate..... | 4-1 |
| 4.2 | Sulphur Emission Control Assistance Program (SECAP) | 4-1 |
| 4.2.1 | Application Procedures | 4-2 |
| 4.2.2 | Eligible Equipment | 4-3 |
| 4.2.3 | Eligible Costs | 4-3 |
| 4.2.4 | Non-Eligible Costs..... | 4-4 |
| 4.2.5 | Connected Person..... | 4-5 |
| 5 | Special Provisions for Transition from Pre-1994 | |
| 5.1 | Crown Royalty Paid Banks..... | 5-1 |
| 5.1.1 | Conversion to Native Status..... | 5-1 |
| 5.1.2 | Royalty Paid Bank Transfer Rules..... | 5-2 |
| 5.2 | Establishing and Tracking Commercial Storage Scheme Balances..... | 5-4 |
| 6 | Exemptions, Waivers and Other Royalty Reductions | |
| 6.1 | Deep Gas Royalty Holiday (DGRHP) | 6-1 |
| 6.1.1 | Calculation of Benefits | 6-2 |
| 6.1.2 | Eligibility for Deep Gas Royalty Holiday..... | 6-2 |
| 6.2 | Gas Consumed in Oil Sands Schemes and Experimental Oil Projects | 6-3 |
| 6.3 | Injected Gas and Gas Products | 6-3 |
| 6.3.1 | Commercial Storage Schemes – Injection | 6-4 |
| 6.3.2 | New Gas and New Pentanes-Plus Status | 6-4 |
| 6.4 | Enhanced Oil Recovery (EOR) Scheme – Recovery of Cost Allowances | 6-5 |
| 6.5 | Otherwise Flared Solution Gas Royalty Waiver Applications..... | 6-5 |
| 6.5.1 | Pre-qualification of Eligible OFSG Wells | 6-6 |
| 6.5.2 | Application-based-Qualification of Eligible OFSG Wells | 6-6 |
| 6.5.3 | Economic Parameters to be used in Economic Assessments..... | 6-9 |
| 6.6 | Energy Efficiency Credit Program (EECP) | 6-10 |
| 6.6.1 | Eligibility | 6-10 |
| 6.6.2 | Application..... | 6-10 |
| 6.6.3 | Procedures for Determining Energy Efficiency Royalty Credit | 6-12 |
| 6.6.3.1 | Cost Allocation Procedures | 6-12 |
| 6.6.3.2 | Energy Efficiency Royalty Credit Algorithm | 6-12 |
| 6.6.3.3 | Facility Effective Royalty Rate..... | 6-13 |
| 6.6.3.4 | Electricity Price Forecast..... | 6-13 |
| 6.6.3.5 | Forecast Electricity Used For Gas Processing..... | 6-14 |
| 6.6.3.6 | Forecast Levelized Cost of Service | 6-14 |
| 6.6.4 | Allowable Cost Determination for Initial 120 Months | 6-15 |
| 6.6.5 | Allowable Cost Determination for Electricity After Initial 120 Months | 6-16 |
| 6.6.6 | Allowable Cost Reporting Procedures..... | 6-16 |
| 6.6.6.1 | Designated Plants..... | 6-16 |
| 6.6.6.2 | Non-Designated Plants | 6-17 |
| 6.6.7 | Process to Demonstrate that the Crown has Received the Benefit of Reduced Custom Processing Fees | 6-17 |
| 6.6.8 | Fuel Royalty Assessment Methodology | 6-18 |
| 6.6.8.1 | Fuel Reporting Procedures..... | 6-18 |
| 6.6.9 | Limitation on Credits | 6-19 |

Ch III - Section

7 Levying and Collecting Natural Gas Royalty

7.1 Levy and Collection – Overview 7-1

7.2 Preparing a Payment Remittance 7-2

7.3 Gas Royalty Statement of Account 7-3

7.4 Gas Royalty Invoice..... 7-7

7.5 Crown Gas Royalty Detail 7-19

7.5.1 Crown Royalty Detail Calculation Statement 7-23

7.5.1.1 Facility Average Royalty Rate (FARR%) Statement 7-29

7.5.1.2 Raw Gas Average Royalty Rate (RARR%) Statement 7-30

7.5.1.3 Facility Average Price (FAP) Statement..... 7-31

7.5.2 Crown Royalty Detail Volumetric Statement 7-38

7.6 Other Supporting Schedules 7-40

7.6.1 Low Productivity 7-40

7.6.2 Royalty Exemption Statement 7-45

7.7 Annual Capital Cost Allowance Summary and Detail..... 7-47

7.7.1 Capital Cost Allowance Recapture for Enhanced Oil Recover and Royalty Paid Bank Settlement Summary and Detail..... 7-50

7.7.2 Annual Custom Processing (CP) Fees Net of Operating Costs Summary and Detail 7-53

7.7.3 Custom Processing Fee Recapture for Enhanced Oil Recovery and Royalty Paid Bank Settlement Summary and Detail..... 7-56

7.7.4 Corporate Effective Royalty Rate (CERR) Calculation Summary and Detail..... 7-59

7.7.5 Annual Capital Cost and Custom Processing Fee Adjustment 7-65

7.7.6 Annual Allowable Cost Restriction Adjustment..... 7-68

7.7.7 Royalty Deposit Adjustment..... 7-73

8 Enforcing Compliance with Legislation and Policy

8.1 Calculating Provisional Royalty Compensation 8-1

8.1.1 Accountable Parties 8-1

8.1.2 Provisional Royalty Trigger..... 8-1

8.1.3 Calculating Provisional Royalty Compensation 8-2

8.2 Collecting Outstanding Accounts 8-3

8.3 Determining Leaseholder Liability 8-3

8.4 Late Filing Penalties 8-4

8.5 Penalty Detail Report..... 8-6

8.6 Royalty Calculation Defaults..... 8-8

Chapter IV - Reporting

Ch IV - Section

1 Reporting Overview

1.1 Forms Submitted by Industry to the Department..... 1-1

1.2 Reports Provided to Royalty Clients by the Department 1-2

1.3 Reporting Cycle for a Production Month..... 1-2

1.4 Reporting Cycle for a Production Year 1-4

1.5 Reporting Standards and Styles 1-4

1.5.1 Volumetric Measurement and Conversion to Gigajoules (GJ) 1-4

1.5.2 Monetary Values..... 1-5

1.5.3 Negative Values 1-6

1.5.4 Dates 1-6

1.5.5 Dates on Amended Forms..... 1-6

1.5.6 Due Date of Forms..... 1-6

1.5.7 Time 1-7

Ch IV - Section

| | | |
|----------|---|------|
| 1 | 1.5.8 Telephone Numbers | 1-7 |
| | 1.5.9 Client IDs | 1-7 |
| | 1.5.10 Facsimiles | 1-7 |
| | 1.5.11 Electronic Submission of AC2 and AC4 Forms | 1-7 |
| | 1.5.12 Forms | 1-8 |
| | 1.5.13 Registry Submissions..... | 1-8 |
| 2 | Volumetric Reporting of Mineral Activity | |
| | 2.1 Preparing a Reassignment of Volume Set-up/Change (RMF2) | 2-1 |
| | 2.2 Preparing a Reassignment of Volume Termination (RMF2-T)..... | 2-6 |
| | 2.3 Registering a Single Well or Injection Scheme (RMF3)..... | 2-11 |
| | 2.4 Royalty Triggers and SAF/OAF Reporting Rules for Royalty Assessment..... | 2-20 |
| | 2.5 Validation Rules | 2-20 |
| 3 | Valuing Raw Gas, Residue Gas and Ethane (Valuation Methodology) | |
| | 3.1 Electing a Valuation Method (VA1)..... | 3-1 |
| | 3.2 Preparing a Gas Corporation Average Price Calculation (VA2) | 3-5 |
| | 3.3 Preparing an Annual Statement of Grandfathered Contract Sales (GR2)..... | 3-10 |
| 4 | Valuing Gas Products | |
| | 4.1 Preparing an Annual Sulphur Corporate Average Price (S-CAP) Calculation (VA3) | 4-1 |
| | 4.2 Preparing a Monthly Sulphur Corporate Average Price (S-CAP) Calculation (VA4) | 4-5 |
| 5 | Alberta’s Royalty Share of Allowable Costs | |
| | 5.1 Preparing a Facility Cost Centre Set-up/Change (AC1-V2)..... | 5-1 |
| | 5.1.1 Changing a Facility Cost Centre’s Remaining Useful Life | 5-8 |
| | 5.2.1 Preparing an Annual Capital Cost Allowance Report (AC2-V2)..... | 5-13 |
| | 5.2.2 Preparing an Annual Capital Cost Allowance Report (AC2-V3)..... | 5-24 |
| | 5.3.1 Preparing an Annual Capital Cost Allowance Reallocation (AC3-V1) | 5-36 |
| | 5.3.2 Preparing an Annual Capital Cost Allowance Reallocation (AC3-V2) | 5-39 |
| | 5.4.1 Preparing an Annual Allowable Operating Costs Report (AC4-V1) | 5-43 |
| | 5.4.2 Preparing an Annual Allowable Operating Costs Report (AC4-V2) | 5-48 |
| | 5.5.1 Preparing an Annual Custom Processing Fees Paid Report (AC5-V2)..... | 5-54 |
| | 5.5.2 Preparing an Annual Custom Processing Fees Paid Report (AC5-V3)..... | 5-60 |
| 6 | Other Royalty Reporting | |
| | 6.1 Preparing a SECAP Application (595) | 6-1 |
| | 6.2 Preparing an Application for Proprietary Gas Consumed (PW1)..... | 6-5 |
| | 6.3 Preparing an Otherwise Flared Solution Gas Application Form (OFSG)..... | 6-8 |
| | 6.4 Preparing Commercial Storage Schemes Form | 6-14 |

APPENDIX

A Royalty Triggers and Reporting Rules for Royalty Assessment

| | | |
|---|---|------|
| 1 | Introduction..... | A-1 |
| 2 | Purpose..... | A-1 |
| 3 | Intended Audience..... | A-1 |
| 4 | The Department Terms and Definitions..... | A-1 |
| | 4.1 Royalty Network..... | A-1 |
| | 4.2 Processing..... | A-2 |
| | 4.3 Unsold Stream..... | A-2 |
| | 4.4 Unprocessed Stream..... | A-2 |
| | 4.5 Processed Stream..... | A-2 |
| | 4.6 Purchased Stream..... | A-2 |
| | 4.7 Volumetric Activity “Production”..... | A-2 |
| | 4.8 Product “Gas”..... | A-2 |
| | 4.9 In-Net Facility (within royalty network)..... | A-2 |
| | 4.10 Out-Net Facility (outside of royalty network)..... | A-3 |
| 5 | Legends Used in This Section..... | A-5 |
| 6 | Royalty Triggers, Injection Credits, Other Royalty Reductions and Supporting Royalty Assessment Method Details..... | A-6 |
| | 6.1 Royalty Assessment Methods for In-Net Facility Disposition to Out of Net Facility ... | A-6 |
| | Royalty Trigger Type (Disp): Dispositions to Out of Network..... | A-7 |
| | Royalty Trigger Type (Disp): Disposition to Out of Network with 2 level Cascade..... | A-8 |
| | Royalty Trigger Type - Disposition to Out of Network with Return Fuel..... | A-9 |
| | Royalty Trigger Type – Raw Gas Subsequently Processed..... | A-11 |
| | Royalty Assessment Method for Facility Gas Disposition to Field Straddle Plant..... | A-12 |
| | Royalty Assessment Method for Processed Gas..... | A-13 |
| | Royalty Trigger Type – Injection Credit..... | A-15 |
| | Royalty Assessment Method for Royalty Liable Lease Fuel..... | A-16 |
| | Enhanced Oil Recover (EOR) – Unit Operating Cost Recapture..... | A-17 |

B. Volumetric Reconciliation

| | | |
|---|--|------|
| 1 | Introduction..... | B-1 |
| | 1.1 Reconciliation of all volumetric data that does not have appropriate allocations: | |
| | a. A SAF has not been filed when required..... | B-2 |
| | b. An OAF has not been filed when required..... | B-3 |
| | c. A SAF that has an error in one or more of the stream details so that the factors do not add up to 1.00..... | B-4 |
| | d. An OAF that has an error in one or more of the owner details so that the OAF factors for a stream do not add up to 1..... | B-5 |
| | e. A missing SAF response to a cascade..... | B-6 |
| | f. A SAF response to a cascade is missing the associated OAF..... | B-7 |
| | g. The details for a SAF or OAF were deleted..... | B-8 |
| | 1.2 Reconciliation of all volumetric data at a meter station to determine negative metering differences: | |
| | Select all negative metering differences..... | B-9 |
| | 1.3 Reconciliation of CSO volume allocations: | |
| | Unallocated CSO volumes..... | B-10 |
| 2 | Definitions..... | B-11 |
| 3 | Volumetrics with Missing Allocations (Reconciliation)..... | B-11 |
| | 3.1 Metering Differences Reconciliation..... | B-12 |
| | 3.2 Unallocated CSO Reconciliation..... | B-12 |
| 4 | Ensure Complete Reports..... | B-12 |

Appendix

| | | | |
|-----------|-----|---|------------|
| B | 5 | Volumetric Reconciliation Discrepancy Letters | B-13 |
| | 6 | Provisional Assessment for Volumetric Reconciliation Discrepancies | B-14 |
| | 7 | Reconciliation Products | B-15 |
| C. | | Validation Rules | |
| | 1 | Validation Rules – Volumetric/SF/OAF/RGA Edits | C-1 |
| | 1.1 | SAF/OAF Data Validation Edits | C-1 |
| | 1.2 | RGA Validation Edits | C-7 |
| | 2 | Validation Rules – Annual Form Edits | C-1 |
| | 2.1 | Validation Rules - AC2 - Allowable Costs | C-16 |
| | 2.2 | Validation Rules - AC3 - Capital Costs Allowance Reallocations | C-22 |
| | 2.3 | Validation Rules - AC4 - Allowable Costs - Operating Costs | C-24 |
| | 2.4 | Validation Rules - AC5 - Allowable Costs – Custom Processing Fees Paid | C-27 |
| | 2.5 | Validation Rules – VA2 Form | C-31 |
| | 2.6 | Validation Rules – VA3 Form | C-35 |
| | 2.7 | Validation Rules – VA4 Form | C-36 |
| D. | | Calculation of the Gas and ISC Reference Prices | D-1 |
| E. | | Calculation of Royalty Trigger Factors, Meter Station Factors, Propane and Butane Floor Prices | |
| | 1 | Calculation of Royalty Trigger Factors and Meter Station Factors | E-1 |
| | | Factor Model: | |
| | 1.1 | Basic Principles..... | E-2 |
| | 1.2 | Adjustment to the Price Calculations at each Royalty Trigger Point..... | E-3 |
| | 1.3 | Intra-Alberta Transportation Deduction..... | E-4 |
| | 1.4 | Pipeline Fuel/Loss Factor | E-4 |
| | 1.5 | Adjustments for Prior Period Amendments (IATD + P/L Factor)..... | E-4 |
| | 1.6 | 100% Load Factor Meter Station Toll | E-4 |
| | 1.7 | 100% Load Factor Alberta Average Meter Station Toll..... | E-5 |
| | 1.8 | General..... | E-6 |
| | 1.9 | Factor Model Example..... | E-7 |
| | 2 | Overview of the Propane and Butanes Floor Price | E-7 |
| | 2.1 | Calculate the Propane Floor Price..... | E-7 |
| | 2.2 | Calculate the Butane Floor Price | E-8 |
| | 3 | Canada / United States Exchange Rate | E-9 |
| | 4 | Definition and Source of Posted Prices and Rates | E-9 |
| F. | | NGL Transportation Regions | |
| | 1 | NGL Transportation Region 1 | F-1 |
| | 2 | NGL Transportation Region 2 | F-1 |
| | 3 | NGL Transportation Region 3 | F-2 |
| | 4 | NGL Transportation Region 4 | F-2 |
| | | NGL Transportation Regions Map..... | F-3 |
| G. | | Allowable and Non-Allowable Capital Costs | |
| | 1 | Allowable Capital Costs | G-1 |
| | 2 | Non-Allowable Capital Costs | G-2 |
| | | Allowable and Non-Allowable Capital Costs Chart | G-3 |

| | | |
|-----------|---|------|
| H. | Allowable and Non-Allowable Operating Costs | |
| 1 | Allowable Operating Costs..... | H-1 |
| 2 | Non-Allowable Operating Costs..... | H-1 |
| I. | Operating Cost Centres – Unit Operating Cost Rates | |
| | Designated Facilities 1999 to 2003 | I-1 |
| J. | Description of Account Codes | J-1 |
| K. | Rapidtrans Deposit Slips and Deposit Locations | K-1 |
| L. | Directory of Contacts | L-1 |
| M. | Information Services | M-1 |
| N. | Glossary and Definitions | N-1 |
| O. | User Guide to Client Invoicing | O-1 |
| | Statement of Account | O-2 |
| | Invoice..... | O-3 |
| | Crown Royalty Detail Calculation | O-4 |
| | Crown Royalty Detail Volumetric..... | O-5 |
| | Low Productivity Calculation | O-6 |
| | Default Report | O-7 |
| | Facility Average Royalty Rate | O-8 |
| | Facility Average Price | O-9 |
| | Raw Gas Average Royalty Rate..... | O-10 |
| | Ensure Complete Process Results | O-11 |
| | Outstanding Provisional Assessment Discrepancies | O-12 |
| | PA Summary Report | O-13 |
| P. | Forms | P-1 |
| Q | Natural Gas Liquids Reporting Guidelines | Q-1 |
| R | Index | R-1 |