Gas Royalty Calculation

New Royalty Framework (NRF)

Changes to Allowable Costs

December, 2008
Disclaimer

- This presentation is for informational purposes only, pending approval of the Natural Gas Royalty Regulations 2009.
- Contents of this document may be subject to change.
Topics

1. Overview of changes to Allowable Costs
2. Facility Effective Royalty Rate (FERR)
3. NRF Implementation Plan
4. Phase 1
5. Phase 2
Overview of changes to Allowable Costs

The department will implement the following changes to the monthly and annual allowable cost processes effective the production year January 2009:

- The Unit Operating Cost Rate (UOCR) will be replaced with actual operating costs as reported by the Facility Cost Centre (FCC) operators.
Overview of changes to Allowable Costs (Cont’d)

- The Corporate Effective Royalty Rate (CERR) will be replaced with a Facility Effective Royalty Rate (FERR).

- There will be some changes to the annual reporting forms.
The FERR will be used to determine the monthly and annual Crown share of allowable costs, including capital, operating, and custom processing cost allowances for each royalty client at each ERCB facility.

The Crown share of the facility costs will be summed up and shown on the invoice as one deduction for each charge type.
The FERR will be calculated for each royalty client at each ERCB facility based on the following formula, for a given year:

$$FERR = \frac{\text{Crown royalty value for the client at the ERCB facility} \ (\$)}{\text{Total value for the client at the ERCB facility} \ (\$)}$$
NRF Implementation Plan

- NRF allowable cost changes will be implemented in two phases:
  - Phase I – Monthly Estimated Cost Process, effective 2009 - 01 through 2010 - 03 production periods (for the initial year).
  - Phase II – Initial Annual Billing Period (IABP) Process effective 2010 - 04, and monthly estimated cost process effective 2010 - 04 (and for subsequent years).
Phase 1

Estimated FERR will be calculated as follows:
For January 2009 to April 2009 billing period invoices:

- The department will use January 2008 to December 2008 actual Crown royalty data to calculate the FERR for each royalty client at each ERCB facility. This will be calculated after the December 2008 billing period invoice run.
Estimated FERR (Cont’d)
For May 2009 to March 2010 billing period invoices:

- The department will use the January 2009 to April 2009 actual Crown royalty data to recalculate the FERR for each royalty client at each ERCB facility. This will be calculated after the April 2009 billing period invoice run.

  - Note: Effective the April 2010 billing period invoice, the FERR will be included as part of the IABP process.
Estimated Capital and Custom Processing Costs will be calculated as follows:

For January 2009 to March 2009 billing period invoices:

- The department will use the 2007 actual capital and custom processing costs reported on the AC2, AC3, and AC5 forms. This will be calculated after the December 2008 billing period invoice run.
Phase 1 (Cont’d)

Estimated Capital and Custom Processing Costs (Cont’d)
For April 2009 to March 2010 billing period invoices:

- The department will use the 2008 actual capital and custom processing costs reported on the AC2, AC3, and AC5 forms. This will be calculated during the April 2009 billing period invoice run.
Phase 1 (Cont’d)

Estimated Operating Costs will be calculated as follows:
For January 2009 to April 2009 billing period invoices:

Designated facilities (all types) and non-designated facilities (processing type):

- The department will use the 2007 actual costs filed on the AC4 along with the AC2 distribution percentages to distribute the costs. In the absence of AC2 distribution percentages, the operating costs would default to the FCC operator.
Phase 1 (Cont’d)

Estimated Operating Costs (Cont’d)
For January 2009 to April 2009 billing period invoices:

Non-designated facilities (compressing and gathering types):

- The department will multiply the most recent compressing and gathering portions of the UOCR rate by the client reported volumes for the January 2008 to December 2008 production periods. This amount will then be added to the processing portion determined above. This will be calculated after the December 2008 billing period invoice run.
Estimated Operating Costs (Cont’d)
For May 2009 to March 2010 billing period invoices:

Designated facilities (all types) and non-designated facilities (processing type):

- The department will use the 2008 actual costs filed on the AC4 along with the AC2 distribution percentages to distribute the costs. In the absence of AC2 distribution percentages the operating costs would default to the FCC operator.
Phase 1 (Cont’d)

Estimated Operating Costs (Cont’d)
For May 2009 to March 2010 billing period invoices:

Non-designated facilities (compressing and gathering types):

- The department will multiply the most recent compressing and gathering portions of the UOCR rate by the client reported volumes for the January 2008 to December 2008 production periods. This amount will then be added to the processing portion determined above. This will be calculated after the April 2009 billing period invoice run.

  ◦ Note: Effective the April 2010 billing period invoice, the estimated operating costs will be included as part of the IABP process, together with capital costs and custom processing fees.
**Allowable Cost Estimate Report**

**January 2009 Billing Period Invoice**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Capital Cost Estimate</th>
<th>Operating Cost Estimate</th>
<th>Custom Processing Fee Estimate</th>
<th>FERR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABGP1009</td>
<td>$11,000.00</td>
<td>$15,000.00</td>
<td>$35,024.00</td>
<td>0.2212100</td>
</tr>
<tr>
<td>ABGP1010</td>
<td>$15,000.00</td>
<td>$1,600.00</td>
<td>$35,461.00</td>
<td>0.2812100</td>
</tr>
<tr>
<td>ABGP1011</td>
<td>$3,000.00</td>
<td>$1,516.00</td>
<td>$45,687.00</td>
<td>0.2912100</td>
</tr>
<tr>
<td>ABGP1012</td>
<td>$3,000.00</td>
<td>$12,421.00</td>
<td>$79,844.00</td>
<td>0.2812100</td>
</tr>
</tbody>
</table>

- **Note:** This report is in a draft format and may be subject to change.
Phase 1 (Cont’d)

- A royalty client may request, at any time, a change or amendment to their estimated FERR and go-forward costs. Upon receipt of a written request, the department will review the validity of the changes.
New clients/facilities:

- For a new royalty client or a new ERCB facility, the department will not automatically determine the monthly estimated go-forward FERR and the estimated dollar amounts for capital costs, operating costs, and custom processing fees.

- A written request with supporting documentation must be submitted by the royalty client in order for the department to calculate these estimated go-forward amounts.

- Failure to submit a written request for a go-forward estimate will result in the royalty client not receiving its monthly Crown share of costs.
Monthly Crown Share of Allowable Costs Deduction:

- The Monthly Crown Share of Allowable costs deduction (capital, operating and custom processing) will be calculated using the FERR at each ERCB facility/client level.

- The Crown share of the facility costs will be summed up and shown on the invoice as one deduction for each charge type.
## Monthly Allowable Cost Deduction

### Monthly Allowable Capital Cost Deduction
Billing Period: April 2000

<table>
<thead>
<tr>
<th>Facility</th>
<th>Total Allowance Amount</th>
<th>Facility Effective Royalty Rate</th>
<th>Total Crown Share Allowance</th>
<th>Accum. Crown Share Allowance Taken</th>
<th>Current Month Crown Share Allowance Taken</th>
<th>Total Remaining Crown Share Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB GP 0001034</td>
<td>$5,652.25</td>
<td>0.3039094</td>
<td>$1,717.77</td>
<td>$454.77</td>
<td>$140.33</td>
<td>$1,122.67</td>
</tr>
<tr>
<td>AB GP 0001042</td>
<td>$20,937.50</td>
<td>0.3051894</td>
<td>$6,389.90</td>
<td>$1,740.54</td>
<td>$516.60</td>
<td>$4,132.76</td>
</tr>
<tr>
<td>AB GP 0001107</td>
<td>$157,412.50</td>
<td>0.2696749</td>
<td>$42,450.20</td>
<td>$11,770.26</td>
<td>$3,408.88</td>
<td>$27,271.06</td>
</tr>
<tr>
<td>AB GP 0001132</td>
<td>$25,982.25</td>
<td>0.3060628</td>
<td>$7,952.20</td>
<td>$2,111.01</td>
<td>$649.02</td>
<td>$5,192.17</td>
</tr>
<tr>
<td>AB GP 0001144</td>
<td>$29,744.00</td>
<td>0.3151878</td>
<td>$9,374.95</td>
<td>$2,531.01</td>
<td>$760.44</td>
<td>$6,083.50</td>
</tr>
<tr>
<td>AB GP 0001173</td>
<td>$39,258.00</td>
<td>0.3009569</td>
<td>$11,814.97</td>
<td>$3,218.22</td>
<td>$955.19</td>
<td>$7,641.56</td>
</tr>
<tr>
<td>AB GP 0001187</td>
<td>$15,241.80</td>
<td>0.3323583</td>
<td>$5,065.74</td>
<td>$1,350.07</td>
<td>$412.85</td>
<td>$3,302.82</td>
</tr>
<tr>
<td>AB GP 0001305</td>
<td>$8,858.40</td>
<td>0.2897982</td>
<td>$2,567.15</td>
<td>$694.53</td>
<td>$208.07</td>
<td>$1,664.55</td>
</tr>
<tr>
<td>AB GP 0001351</td>
<td>$21,752.40</td>
<td>0.3263784</td>
<td>$7,099.51</td>
<td>$1,920.78</td>
<td>$575.41</td>
<td>$4,603.32</td>
</tr>
<tr>
<td>AB GP 0001450</td>
<td>$15,653.50</td>
<td>0.3805097</td>
<td>$5,956.31</td>
<td>$0.00</td>
<td>$661.81</td>
<td>$5,294.50</td>
</tr>
<tr>
<td>AB GS 0002205</td>
<td>$13,820.10</td>
<td>0.3467731</td>
<td>$4,792.44</td>
<td>$1,305.39</td>
<td>$387.45</td>
<td>$3,099.60</td>
</tr>
</tbody>
</table>

**Total** | **$8,676.05**

*Note: This report is in a draft format and may be subject to change.*
## Monthly Allowable Cost Deduction

**Monthly Allowable Custom Processing Fee Deduction**  
**Billing Period Invoice: April 2000**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Total Allowance Amount</th>
<th>Facility Effective Royalty Rate</th>
<th>Total Crown Share Allowance</th>
<th>Accum. Crown Share Allowance Taken</th>
<th>Current Month Crown Share Allowance Taken</th>
<th>Total Remaining Crown Share Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB GP 0001025</td>
<td>$40,000.00</td>
<td>0.1505524</td>
<td>$6,022.10</td>
<td>$0.00</td>
<td>$501.84</td>
<td>$5,520.26</td>
</tr>
<tr>
<td>AB GS 0002443</td>
<td>$10,000.00</td>
<td>0.3484837</td>
<td>$3,484.84</td>
<td>$0.00</td>
<td>$290.40</td>
<td>$3,194.44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$50,000.00</strong></td>
<td></td>
<td><strong>$9,506.94</strong></td>
<td><strong>$0.00</strong></td>
<td><strong>$792.24</strong></td>
<td><strong>$5,324.80</strong></td>
</tr>
</tbody>
</table>

*Note: This report is in a draft format and may be subject to change.*
## Monthly Allowable Cost Deduction

**Billing Period: April 2000**

<table>
<thead>
<tr>
<th>Facility</th>
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<td>$4,792.44</td>
<td>$1,305.39</td>
<td>$387.45</td>
<td>$3,099.60</td>
</tr>
<tr>
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<td><strong>$8,676.05</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Phase 1 (Cont’d)

AC1 Form:

- Changes to AC1 form consist of the removal of the fields relating to the ‘Reported ERCB Facility Code’ and ‘Effective Date’ (Fields 2.9 and 2.10).

- AC1 submissions can be either Version 1 (Production Year 2008 or earlier) or Version 2 (Production Year 2009 or greater).

- The Registry will automatically determine which version to use based on the FCC Start Date. The title section of the screen will display the version being used.
AC1 Form (Cont’d)

- For pre-NRF periods, information may be reported in these fields, and for the NRF periods, these fields will not appear.

- For ‘Batch AC1’ submissions, a warning notification will be sent by PRA via email that these fields will be ignored if a user includes information in the ‘Reported ERCB Facility Code’ and ‘Effective Date’ sections.
**Setup Facility Cost Centre (V1)**

**FCC Information:**
- FCC ID: To be assigned
- Submission Status: UNCONFIRMED
- FCC Name: 012345678901234567890123456789012345678901234567890
- EUB Facility: 
- FCC Type: processing
- FCC Start Date: 2005-04
- FCC End Date: 
- FCC Operator: 01234567890 CANADIAN NATURAL RESOURCES LIMITED
- FCC Operator Start Date: 2005-04
- FCC Operator End Date: 

**Status & RUL:**

<table>
<thead>
<tr>
<th>Production Year</th>
<th>RUL</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>10</td>
<td>ACTIVE</td>
</tr>
</tbody>
</table>

**Reported Facility:**

<table>
<thead>
<tr>
<th>Delete</th>
<th>Reported Facility</th>
</tr>
</thead>
</table>

**Previous FCC(s):**

<table>
<thead>
<tr>
<th>Delete</th>
<th>FCC ID</th>
</tr>
</thead>
</table>

**Owner(s):**

<table>
<thead>
<tr>
<th>Delete</th>
<th>Owner ID</th>
</tr>
</thead>
</table>

**Contact Information:**
- First Name: Anyname
- Last Name: User
- Phone Number: 123-456-7890
- Date Prepared: 2005-04-18

**Additional Information:**
- Validate
- Submit
- Cancel
Reported ERCB Facility removed
Phase 1 (Cont’d)

Unit Operating Cost Rate (UOCR):

- The UOCR will no longer be used to determine operating cost deductions for all royalty clients (owners and non-owners).

- Instead, only the owners receiving the actual operating costs allocations, would receive the operating cost deduction.

- The monthly estimated operating cost deduction will appear as a new charge type, ‘Monthly OP Deduction’, on the invoice rather than as a deduction within the Crown Royalty charge type.
# An Example of an Invoice

![Invoice Image](image)

<table>
<thead>
<tr>
<th>Royalty Payer</th>
<th>Consoliated</th>
<th>Invoice Number</th>
<th>Billing Period</th>
<th>Issue Date</th>
<th>Invoice Due Date</th>
<th>Account Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID: 7777</td>
<td></td>
<td>45553</td>
<td>2000/02</td>
<td>2000/04/30</td>
<td>2000/05/31</td>
<td>G94110502</td>
</tr>
</tbody>
</table>

**Client(s):** Hello

<table>
<thead>
<tr>
<th>Charge Type</th>
<th>Prior Period Amount ($)</th>
<th>Client Prior Period Amount ($)</th>
<th>Current Period Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crown Royalty</strong></td>
<td>11,699.35</td>
<td>11,699.35</td>
<td>11,699.35</td>
</tr>
<tr>
<td><strong>Total Charges</strong></td>
<td>11,699.35</td>
<td>11,699.35</td>
<td>11,699.35</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly CC Deduction</td>
<td>-1.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly CP Fee Deduction</td>
<td>-0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly Op Cost Deduction</td>
<td>-3.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>0.00</td>
<td>0.00</td>
<td>-6.37</td>
</tr>
<tr>
<td>Adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposit Adjustment</td>
<td>76.72</td>
<td>76.72</td>
<td>11,609.16</td>
</tr>
<tr>
<td>Prior Period Interest</td>
<td>76.72</td>
<td>76.72</td>
<td>11,609.16</td>
</tr>
<tr>
<td><strong>Total Adjustments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$11,776.07</strong></td>
<td><strong>$11,776.07</strong></td>
<td><strong>$23,392.33</strong></td>
</tr>
</tbody>
</table>
Phase 1 (Cont’d)

Monthly Allowable Cost Restriction (ACR):

- Operating cost deductions will now be included in determining the monthly allowable cost restriction on the invoice.

- If the monthly Crown share of estimated costs (capital + operating + custom fees) exceeds the monthly Crown royalties, an ACR adjustment will be shown on the invoice.
Monthly Allowable Cost Restriction (ACR) Cont’d

- Monthly allowable cost restrictions will still be applied at the corporate level on the invoice, the same as in the pre-NRF system, to ensure that the total allowable cost deductions do not exceed the Crown royalty for the production month.
Phase 2

- Currently, development of Phase 2 is in the planning stage, as such, the information provided here may be subject to change.

- Changes to the actual and estimated Costs/FERR processes will be implemented in Phase 2, in the Initial Annual Billing Period Invoice (IABP), run in April 2010.
Phase 2 (Cont’d)

AC2 Form:
- Actual operating costs will be filed by all operators, in addition to actual capital costs.

- To accomplish this change, a new AC2-V4 form will be created and titled the “Capital and Operating Cost Allowance: Production Years 2009 and Onwards”.

- This new form is a combination of 2 forms: the ‘Operating Costs’ (AC4) form and the ‘Capital Costs Allowance’ (AC2) form.
AC2 Form (cont’d)

The following new sections will be added:

◦ Capital costs allocations to multiple delivery facilities for clients with working interest ownership in the FCC.

◦ Operating costs allocations to multiple delivery facilities for clients with working interest ownership in the FCC.

◦ Distribution of operating cost allowance allocations to working interest owners.

◦ Reporting the ‘Custom Processing Adjustment Factor (CPAF)’ for operating costs.
Phase 2 (Cont’d)

AC2 Form (cont’d)

- The due date for submission of this new form will be April 30th.

- The penalty for late submission of the AC2 form will be $100.00 per month (after form due date) to a maximum of 6 months.
AC3 Form:

- A new AC3-V3 form will be created called “Capital and Operating Cost Allowance Reallocation: Production Years 2009 and Onwards”.

- This form will allow reallocation of capital and operating costs to multiple clients and ERCB facilities.

- This form will aid royalty clients to eliminate cost restrictions due to misaligned costs with royalty trigger volumes.

- Note: If a royalty client reallocates costs from a source facility to a destination facility that is not within the same royalty network, then the department will disallow this reallocation.
Phase 2 (Cont’d)

AC3 Form (cont’d)

- The pre-NRF version of this form included a section called ‘Custom Processing Volume Reallocations’. This section will no longer be required for the NRF periods and will be deleted from the form.

- The due date for submission of this form is the same as before, that is May 15th. There is no penalty for late submission of this form (no change from pre-NRF).
Phase 2 (Cont’d)

AC5 Form:

- A new AC5-V4 form, “Custom Processing Fees Paid”, will be created without Part 3 (Custom Processing fees paid by owners in Facility Cost Centre(s) Tied to ERCB Facility).

- This part was used to identify custom fees with partial ownership, but will no longer be required since the process to recapture operating costs from non-owners will be eliminated.
AC5 Form (Cont’d)

- The due date for submission of this form is May 15th (no change from pre-NRF).

- The penalty for late submission of the AC5 form will be $100.00 per month (after form due date) to a maximum of 6 months.
Crown Share of Costs:

- The Crown share of the actual capital costs, operating costs and custom processing fees will be calculated using the actual FERR for each client/facility.

- The concept of updating the actual capital costs and custom processing fees, and implementing the monthly go-forward estimates at IABP remains the same, except being applied at a client/facility level.
Phase 2 (Cont’d)

Crown Share of Costs (cont’d)

The concept of updating the actual operating costs (currently adjusted once a year in the February billing period invoice) and implementing the monthly go-forward estimates will be similar to custom processing fee and capital cost calculated at IABP.
Phase 2 (Cont’d)

Crown Share of Costs (cont’d)

Further adjustments resulting from amendments filed in any month after IABP will be subject to prior period interest charges for capital, custom processing and operating costs.

Since only owners will receive monthly estimated operating cost deductions, the process to recapture operating costs from non-owners will be eliminated.
Phase 2 (Cont’d)

Annual Allowable Cost Restrictions (AACR):

The annual Crown share of actual allowable costs will be determined for each client/facility. If the annual Crown share of actual costs (capital + operating + custom fees) exceeds the annual royalties payable at the ERCB client/facility level, there will be a restriction resulting in an AACR adjustment shown on the invoice.
The End

Thank You 😊