

Final

**NATIONAL ENERGY BOARD**

**Testing of  
Time Reporting Interim Procedures (TRIP)  
for  
2000 - 01**

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## EXECUTIVE SUMMARY

By letter dated December 6, 2002 the Office of the Auditor General (OAG) requested the assistance of Audit & Evaluation (A&E) staff to audit the Board's Time Reporting Interim Procedures (TRIP) for 2000-01. The objective of this audit is:

To obtain sufficient appropriate evidence that hours charged in 2000-01 to the three commodities and to indirect time codes were reasonable and complete, as supported by approved time records (authorized, recorded, accumulated properly, proper amount, proper period).

Appended to OAG's December 6, 2002 letter are specific audit procedures.

As requested, A&E staff examined one timesheet selected at random for each month of fiscal year 2000-01 for proper authorization, proper time amount, time type and commodity code and proper task ID (pilot sample). When higher than expected number of variances from the norm were observed, OAG staff was consulted. It was decided that the requested procedure of selecting at random, one week for one team in 2000-01 and agreed the total weekly hours reported in TRIP summary to individual timesheets should be extended to one month. The purpose of extending the procedure is to ensure that cut-offs on a monthly basis are properly performed.

In conducting this extended procedure for a team in Applications Business Unit for January 2001, we noted that the hours recorded in the TRIP summary reports were lower than the hours added up from individual timesheets for the team. Upon investigation, it was determined that the discrepancy was primarily due to the fact that the hours of an employee who had been transferred into the team remained with the former team. As well, we observed in passing that the timesheets used for this test contained issues similar to those observed in the pilot sample.

Based on the evidence gathered from executing the procedures requested by OAG, A&E staff determined that it is not in the position to attest to the fairness of the time values produced by TRIP. Further testing would be required. In consultation with OAG staff, it was decided that a statistical sample of individual timesheets would be tested for proper authorization, proper time amount, time type and commodity code and proper task ID. As well, broad analysis would be conducted to ensure that the Board-wide time values for 2000-01 are within a zone of reasonableness.

When a statistical sample of 84 items were examined, seven instances of gas or electricity hours recorded as overhead, frontier hours recorded as overhead and wrong time types were observed. Moreover, some 20% of the statistical sample contained deficiencies in authorization. Upon further analysis, we determined that the "error" rates were acceptable. The result of broad analyses for reasonableness indicated that the hours reported in TRIP were within an acceptable zone of reasonableness.

Based on these audit results, we concluded that the hours recorded in TRIP for 2000-01, including the hours charged to the three commodities (gas, oil and electricity) and to indirect time codes, were reasonable. In our opinion, having conducted the audit procedures as requested by the OAG and the extended audit procedures, sufficient and appropriate audit procedures have been conducted and evidence gathered to support the conclusion reached.

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## I. INTRODUCTION

Pursuant to the *National Energy Board Cost Recovery Regulations*, companies regulated by the NEB pay cost recovery charges to the Board. Recoverable expenditures incurred by the Board are reported on a calendar year basis in the Board's Statement of Expenditures and Receipts (Statement). The Office of the Auditor General (OAG) audits the Statement annually. As part of this annual audit, OAG requests the assistance of the Audit & Evaluation (A&E) unit in examining the time records of the Board. By letter dated December 6, 2002, OAG requested A&E to examine the records in NEB's Time Reporting Interim Procedures (TRIP) for 2000-01. A description of TRIP is attached as Appendix 1. The result of this examination is to be incorporated in OAG's audit of the Statement for the year ended December 31, 2002.

## II. AUDIT OBJECTIVE

OAG identified, in its December 6, 2002 letter, the following objective for the audit of the 2000-01 TRIP records:

To obtain sufficient appropriate evidence that hours charged in 2000-01 to the three commodities and to indirect time codes were reasonable and complete, as supported by approved time records (authorized, recorded, accumulated properly, proper amount, proper period).

## III. AUDIT PROCEDURES

### A. Requested procedures

In its December 6, 2002 letter, OAG requested that A&E staff conduct the following audit procedures:

1. For the 2000-01 fiscal year, determine whether the procedures and controls that were in place for TRIP were the same as those in place for the first three months of the calendar year 2000.
2. Select at random one timesheet for each month in the 2000-01 fiscal period (pilot sample) and perform the following:
  - a) ensure employee and supervisor signed the timesheet (authorized);
  - b) ensure regular hours recorded on timesheet do not exceed the standard amount of 7.5 hours (proper amount); and
  - c) ensure hours on timesheets were coded to correct commodity codes (proper amount accumulated properly).
3. Select at random, one week for one business unit (say, BU#520) in the 2000-01 fiscal year and agree the total weekly hours to individual timesheets (to ensure that all hours reported in the TRIP summary are supported by approved timesheets).
4. Document the analysis / tests ensuring hours on timesheets for 2000-01 were input to TRIP, and no timesheets include hours worked in fiscal 1999-2000 and 2001-02 (recorded, proper period).

### B. Extended procedures

1. As described in greater details in section IV, when we performed requested procedure A.2, the number of "errors" observed were higher than expected. In consultation with OAG staff, it was determined that requested procedure A.3 would be extended to one month from one week

(extended sample). The purpose of extending this procedure was to ensure that properly cutoffs were performed when monthly and quarterly summary reports were prepared.

2. As detailed in section IV, when we conducted extended procedure B.1, we identified discrepancies between the hours grossed up from individual timesheets and the hours recorded in the TRIP summary reports. As well, we noted in passing that some of the deficiencies observed when the pilot sample was tested were found in the extended sample also.

It was therefore the conclusion of the A&E staff that the result of the requested procedures and extended procedure B.1 did not provide an adequate evidentiary basis for a conclusion on the fairness of the time values produced by TRIP and that further testing would be required. It was determined that the following additional procedures should be conducted:

- a) A statistical sample of individual timesheets is to be tested for proper authorization, proper time amount and time type, and proper accumulation. These tests should yield results at a 95% confidence level and an acceptable confidence interval.
- b) Reasonableness analysis on the total hours, the hours directly charged to commodities, overhead, frontier and other codes.

#### IV. RESULTS

##### A. Continuity of TRIP

In accordance with audit procedure III.A.1, it was determined that, as of January 1, 2002, Board staff put in place TRIP, as an interim measure, to capture hours worked by employees. Based on discussions with NEB staff, it was confirmed that, for 2000-01, the procedures and controls for TRIP was the same in all material respects as those in place for the first three months of the year 2000.

##### B. Proper authorization, proper time amount and type and commodity code

As per audit procedure III.A.2, 12 individual timesheets were selected at random from the files of individual timesheets kept in binders in the NEB Finance area. It was tested for proper authorization, proper time amount and type, and proper commodity coding. The following variances from the norm were observed:

Observation	Number of Timesheets having the Observed Condition (out of the 12 examined)	Number of Occurrence Of Observed Condition
Oil hours charged to Gas Client	1	3
Frontier hours recorded as overhead hours	1	1
Recorded regular hours less than hours of work (7 ½ hrs)	1	1

Furthermore, in three of the 12 cases, the employee's signature and that of the supervisor, indicating authorization, were dated more than two months after the time worked.

As the incidents of "errors" were higher than expected, it was decided that the audit procedures should be extended.

C. Reconciliation of hours recorded in timesheets to hours in TRIP Summary Reports

Pursuant to audit procedure III.B.1, the hours in the individual timesheets of a team in Applications Business Unit for January 2001 was added up and checked against the hours reported in TRIP summary reports. We noted that the hours recorded in TRIP summary reports were significantly lower. Upon investigation, it was determined that the discrepancy was primarily due to the fact that the hours of an employee who had been transferred into the team remained with the former team.

As well, we observed in passing that the timesheets examined in this test contained errors similar to those observed in the pilot sample. For example, in some instances the recorded regular hours were less than the normal hours of work, and the signatures of the employee and team leader were dated more than two months after the hours worked.

D. 2000-01 time reports do not contain hours from previous and subsequent fiscal years

In accordance with audit procedure III.A.4, for the weeks of April 3, 2000 and March 26, 2001, the individual time sheets for a team in Applications Business Unit were analyzed and traced into the TRIP spreadsheets. It was determined that all of the hours charged were properly reported as 2000-01 hours and that no timesheets included hours worked in the previous or subsequent fiscal years.

E. Tests for proper authorization, proper time amount and type and commodity code using a statistical sample

(i) Observations

As per audit procedure III.B.2.a, a statistical sample of 84, which was designed to yield results with a 95% confidence level and a 10.65% confidence interval, was tested. The procedures for determining sample size and selecting the statistical sample are described in Appendix 2. Again, the following variances from the norm were observed:

Observation	Number of Timesheet with the Observed Condition	Total Number of Occurrence	Total Hours
Gas or electricity hours recorded as overhead	5	9	42.5
Frontier hours recorded as overhead	1	1	0.5
Wrong time type (Note 1)	1	3	1.5

Note 1: Regular hours recorded as banked time and regular hours exceeded normal hours of work

In addition, there were deficiencies in authorization in 17 of 84 (or 20%) of the items tested. Most of them were related to approvals made more than two months after the hours worked. Other deficiencies observed include no employee signature (often because the person left the Board without completing the timesheets), signatures not dated and administrative assistant signing on behalf of the employee.

(ii) Analysis of observations

Regarding the instances of hours that should have been charged to a commodity but were recorded as overhead, results from the statistical sample indicated that 6% (5 out of 84) of the 2000-01 time sheets contained such errors. Within each of these timesheets, A&E staff estimated that 8 ½ hours out of the averaged 38 ½ hours worked (regular plus banked time) or 22% were incorrectly coded. This suggested that, of the total work hours recorded, approximately 1.3% (22% times 6%) were coded incorrectly. In the opinion of A&E staff this error rate is acceptable.

With respect to the one out of 84 timesheets that contained time that should have been charged to frontier activities but were recorded as overhead, we noted that the same error was observed in the pilot sample. To further assess how widespread was this situation. The timesheets of the Exploration and Production team were scanned. It became apparent that somebody neglected to enter "frontier" to a line used to record banked time. As the error was not caught by anyone, it was repeated. In A&E staff's estimate, the situation did not create material misstatement of the frontier hours charged by the Exploration and Production team.

As for the one timesheet that contained wrong time types, staff noted that the situation would not result in material issues in the context of cost recovery. This was because the commodity codes were recorded correctly.

F. Tests for reasonableness of time values

For 2000-01, the hours directly reported in TRIP were as follows:

<b>Description</b>	<b>Hours</b>	<b>%</b>
Gas	174,045	31
Oil	74,830	13
Electricity	27,717	5
Frontier	29,643	5
Overhead	257,796	46
Miscellaneous (note 1)	2,508	<1
<b>Total</b>	<b>566,540</b>	<b>100</b>

Note 1: Miscellaneous hours include commodity pipeline, NPA, Yukon and multi-client hours

Given the approximately 290 Full-Time Equivalent (FTE) employees at the Board in 2000-01, the total hours reported, averaging to about 37.5 hours per week appeared reasonable.

Regarding frontier hours, the directly reported hours represented the regular hours of 15.2 FTE employees. As the vast majority of the hours recorded by the 12 employees in the Exploration and Production Team were charged to frontier activities, the hours equivalent to slightly over three FTE that were charged by staff outside this team to frontier activities was not beyond the realm of reason. As well, the reported 2000-01 frontier hours represented an increase of five percent over those recorded in 1999-2000. Directionally, the increase appeared reasonable.

The hours directly charged to overhead continued to decline in 2000-01 (by 22% and 16% respectively over the previous two audited fiscal years), indicating that employees were increasingly rigorous in charging time directly to commodities. Nevertheless, the test results for the pilot and the statistical



samples suggested that more of the overhead hours should have been charged directly to commodity codes.

The hours attributable gas (after overhead distribution) in 2000-01 was 63% of the total hours attributable to the three principal commodities. This percentage is in a same range as the percentages found in recent years.

Allocated hours for electricity increased by 80% over 1999-2000 to the equivalent of approximately 26 FTE. This appeared to be consistent with the huge increase in the number and complexity of electricity proceedings before the Board in 2000-01. The hours allocated to oil as a percentage of the hours attributed to the three principal commodities remained near the 25% range and appeared to accord with the steady level of activities related to this commodity.

Taken together, the result of these analyses indicated that the hours reported in TRIP were within an acceptable zone of reasonableness.

## **V. CONCLUSION**

In view of the foregoing, we concluded that the hours recorded in TRIP for 2000-01, including the hours charged to the three commodities (gas, oil and electricity) and to indirect time codes, were reasonable. In our opinion, having conducted the audit procedures as requested by the OAG and the extended audit procedures as described in section III.B, sufficient and appropriate audit procedures have been conducted and evidence gathered to support the conclusion reached.

## **Appendix 1: Time Reporting Interim Procedures (TRIP)**

### **A. A Temporary Replacement for TRS**

For years, the Board used a database program called the Time Reporting System (TRS) to capture the hours worked by employees and then allocated these hours to specific commodities for cost recovery purposes. Towards the end of the nineties, recognizing that TRS is not Y2K compliant, Board staff began to examine alternatives.

When it became clear that a new software program would not be implemented before 2000 began, Board staff developed a series of Excel spreadsheets to capture employee time. This interim measure, referred to as Time Reporting Interim Procedures (TRIP) was to be used for the first six months of 2000.

However, replacing TRS took much longer than anticipated. First, NEB management decided to cancel a contract awarded for the development of a new "time" system because the software to be used would not be compliant with the Integrated Systems Architecture (ISA) then being implemented. Second, the "time" project was delayed in order to integrate it with the Information Systems Methodology (ISM) initiative. TRIP ended up being the management information system for time reporting for the years 2000 and 2001, and part of 2002.

Being a series of spreadsheets, TRIP does not contain any of the systems controls one expects to find in a database program. For example, TRIP does not establish control totals to ensure that a full-time employee charges only 37.5 hours of regular hours in a week. TRIP does not have the capability to reject obvious incongruities. Thus, it would accept hours charged to a TransCanada PipeLines Limited toll hearing as "oil" hours. The efficacy of TRIP as a management information system is therefore dependent on the awareness, attention and training of NEB staff responsible for recording, entering, analyzing and reporting time.

### **B. TRIP Procedures**

On the first working day after the completion of a week, NEB employees are required to record in a form their hours by time type, amount, commodity and task ID. During 2000-01 a wide variety of forms were in use. Most employees used the old TRS template. Some, including members of the Legal Services team used customized forms. The team's administrative assistant then enters the hours into TRIP. Passwords and menu masks were used to allow only authorized personnel to access the system.

The administrative assistant then prints out a copy of the timesheet and give it to the employee for signature. Signed timesheets are provided to the Team Leader for review and approval.

To promote timely reporting, the Planning and Reporting team issues "Missing Timesheet Report" generally on the second Monday of each month, allowing administrative assistants to take follow-up action with the employee and the team leader.

At the end of the fiscal year, the Administrative Assistant performs quality checks on the timesheet files and forward them in binders to Information Resources and Distribution team for retention.

For management information purposes, Planning and Reporting produces summary reports on a monthly and quarterly basis.

C. Distribution of Hours

For reporting purposes, hours captured in TRIP are rolled up into nine categories: gas, oil, electricity, commodity [pipelines], frontier, multi-client (tasks associated with many regulated companies), overhead (leaves and non-specified hours), NPA and Yukon. Multi-client and overhead hours are distributed as follows:

1. Multi-client hours are distributed on a pro-rata basis to gas, oil, electricity, commodity pipelines and frontier, i.e., all categories except overhead, NRA and Yukon; and
2. Overhead hours are distributed to on a pro-rata basis to all other categories.

The resulting hours attributable the three principal commodities (gas, oil and electricity) and commodities [pipelines] are used to calculate ratios for cost recovery purposes pursuant to *NEB Cost Recovery Regulations*.

## Appendix 2: Determination of Sample Size and Statistical Sample Selection

### 1. Estimated population size

Number of employees (from Staff List)

August 31, 2000	318
March 31, 2001	321

For sample selection purpose, the number of employee is taken as 320.  
The number of weekly time sheets for 2000-01 is estimated to be 16,640.

### 2. Determination of sample size

The NCS Pearson Sample Size and Confidence Interval Calculator was used. It was determined that at the desired confidence level of 95%, the sample sizes over a relevant range of confidence intervals are:

<u>Confidence Interval</u>	<u>Sample Size</u>
5 %	375
6 %	263
7 %	194
8 %	149
9 %	118
10%	95

In the interest of efficiency, A&E staff decided to start with a sample of 95 which would yield results at a 95% confidence level and 10% confidence interval. The intention was to assess the situation after testing of this sample had been completed. If required, further sampling and testing would be done.

### 3. Sample selection

Using a true random number generator, 95 random numbers were generated and sorted in ascending order. The individual time sheets filed in binders by team and by employee were used as the sampling source. The first time report of Team Number 540 was picked at random as the starting point. Assigning a number sequentially to each timesheet, the time sheets matching the generated random numbers were tagged for examination.

In this manner, the last timesheet on file was assigned the number 15,063. In other words, the timesheet population was a bit smaller than expected. While A&E staff noticed a small number of missing timesheets, the size of the timesheet population appeared reasonable because it is equivalent to the timesheets for 290 FTE, which is approximately the FTE on strength at the Board during 2000-01.

As the population size is somewhat smaller than expected, the sampling procedure yielded 84 items. The achievable confidence interval was therefore plus and minus 10.65%.