



**REGULATED DEFAULT SUPPLY COMPLIANCE  
BUSINESS CASE  
2005-2009**

## Executive Summary

DERS is proposing to complete the Regulated Default Supply Compliance project (RDS Project) in response to the *Regulated Default Supply Regulation*, AR 168/2003 and EUB Directive 012: Alberta Tariff Billing Code, both of which require DERS to provide certain information technology capabilities in respect of customer billing data and processes.

This business case describes the three phases of the RDS Project and the costs associated therewith, including incremental cash flow analysis and revenue requirement impact. The cost of the RDS Project is forecast to be \$1.3 million, spread among three projects. DERS anticipates a final Phase III project in-service-date of January 31, 2006. The expected revenue requirement impact over the 2005-2006 test period is summarized below.

Incremental 2005 Revenue Requirement (\$000)	DRT	\$55.8
	<u>RRT</u>	<u>\$10.5</u>
		\$66.3
Incremental 2006 Revenue Requirement (\$000)	DRT	\$310.5
	<u>RRT</u>	<u>\$ 60.8</u>
		\$371.3

Given the compliance requirements of the RDS Project and the lack of viable alternatives, DERS recommends proceeding with the RDS Project as set out in this business case.

## Table of Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	BUSINESS CASE SUBJECT .....	1
1.2	BACKGROUND .....	1
1.3	TECHNICAL/BUSINESS DRIVERS .....	3
1.4	BENEFITS RATIONALE.....	4
<b>2</b>	<b>PROJECT DESCRIPTION.....</b>	<b>4</b>
2.1	PHASE I BILL PERIOD ALIGNMENT .....	4
2.2	PHASE II - CONSUMPTION ALIGNMENT.....	5
2.3	PHASE III – ALBERTA TARIFF BILLING CODE .....	5
2.4	PROJECT COST DESCRIPTION .....	7
2.5	PROJECT COST ASSUMPTIONS.....	8
2.6	ALTERNATIVES TO THE RDS PROJECT.....	8
<b>3</b>	<b>FINANCIAL METRICS.....</b>	<b>10</b>
3.1	ANALYSIS PERIOD .....	10
3.2	REVENUE REQUIREMENT .....	10
3.3	CASH FLOW .....	11
3.4	SENSITIVITY ANALYSIS .....	12
<b>4</b>	<b>CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>12</b>
	<b>SUPPLEMENT A .....</b>	<b>13</b>

## 1 Introduction

### 1.1 Business Case Subject

This business case evaluates the projected costs of DERS' proposed Regulated Default Supply Compliance Project (RDS Project). DERS intends to undertake the RDS Project in three distinct phases: Phase I is the Bill Period Alignment, Phase II is the Consumption Alignment and Phase III is the Alberta Tariff Billing Code compliance. Combined, the three phases will enable DERS to comply with the *Regulated Default Supply Regulation*, AR 168/2003 (RDS Regulation) and EUB Directive 012: Alberta Tariff Billing Code (TBC). DERS has designed the RDS Project to provide the same functionality for billing both DRT and RRT customers.

DERS has included the costs of the RDS Project in its 2005-2006 forecast revenue requirement, allocated between the DRT and RRT on the basis of customer count.

### 1.2 Background

In 2002, DEML entered into an agreement with the ATCO Group (ATCO) to transfer ATCO's natural gas and electricity retail functions to DEML. Subject to certain conditions, the EUB approved the transfer in Decision 2003-098, including the appointment of DERS to perform the Default Supply Provider and Regulated Rate Tariff functions on behalf of ATCO. Consequently, DERS provides natural gas to approximately 850,000 households and electricity to 165,000 households in Alberta, along with certain regulated customer care services.

As a regulated service provider, DERS is required to comply with the RDS Regulation and the TBC. Section 9(1) of the RDS Regulation stipulates that:

*9(1) Effective April 1, 2005, for regulated rate customers,*

*(a) both the electric energy charge and the delivery charge to customers in a billing period must be based on common consumption data for that billing period, and*

*(b) at sites where electric energy consumption is metered, at least twice each calendar year the charge for electric energy for a billing period must be based on an actual meter reading.*

The TBC was created by the EUB to:

*... establish the standards for communicating site-specific distribution and transmission tariff charges and usage information relevant to calculating energy charges in a format for the operation of an efficient, fair and openly competitive electricity market in Alberta.<sup>1</sup>*

The TBC sets out, among other things, a defined “bill ready” process whereby the wire owner calculates and transmits its site tariff charges to the retailer in a standardized format. The retailer is then required to incorporate those charges into the customer invoices. The TBC also obligates regulated parties to file a TBC compliance plan. A copy of DEML’s Tariff Billing Compliance Plan, filed with the EUB on October 29 2004, is attached hereto as RDS Supplement A.

---

<sup>1</sup> EUB Directive 012: Alberta Tariff Billing Code, p.6

### **1.3 Technical/Business Drivers**

The primary drivers of the RDS Project are the RDS Regulation and the TBC, as set out below.

#### **1.3.1 Phase I - Bill Period Alignment**

Customers have expressed concerns with the disparity in distribution tariff and energy charge bill periods shown on a single invoice. Distribution tariff bill periods are driven by ATCO's processes as a wire owner while energy charge bill periods are set by DERS as close to scheduled billing dates as possible to reduce working capital requirements. The time lag between the energy and distribution period end-dates may be as much as twelve days. Phase I of the RDS Project aligns ATCO and DERS bill periods to remove the time lag. Phase I was completed in October 2004.

#### **1.3.2 Phase II - Consumption Alignment**

Along with completion of Phase I, Phase II of the RDS Project enables DERS to comply with the RDS Regulation and align the consumption used in billing the DERS energy charge and the ATCO delivery charge. Although the above requirement for use of common consumption data applies only to electricity, DERS is of the view that natural gas customers will equally benefit from this alignment and has constructed the RDS Project accordingly. Phase II was completed in April 2005.

#### **1.3.3 Phase III – Alberta Tariff Billing Code**

Phase III of the RDS Project will enable DERS to comply with the bill ready requirements of the TBC. Section 1.3 of the TBC defines bill ready to mean:

*“bill ready” means that a retailer is provided with all the necessary distribution and transmission tariff data elements and charges required to assemble the customer’s bill, with no additional calculations required other than tax calculations and optional charge aggregation.*

Phase III is expected to be completed and in-service by February 2006.

#### **1.4 Benefits Rationale**

The RDS Project is intended to comply with the RDS Regulation and the TBC. While such compliance will contribute to “the operation of an efficient, fair, and openly competitive electric market in Alberta”<sup>2</sup>, DERS does not anticipate any financial benefits arising directly from the RDS Project.

## **2 Project Description**

### **2.1 Phase I Bill Period Alignment**

In Phase I of the RDS Project, DERS’ method for determining customer bill periods is altered so that DERS’ scheduled bill periods for each billing cycle aligns with that of ATCO. Phase I includes defining requirements, modification of DropChute transactions, testing, training, and updates to DERS policies and processes. Customer bill formats also change to provide improved information to customers.

---

<sup>2</sup> EUB Directive 012: Alberta Tariff Billing Code, p.6

## **2.2 Phase II - Consumption Alignment**

Phase II of the RDS Project is proposed specifically to comply with the RDS Regulations. Completion of Phase II enables DERS to calculate retail energy charges based on the actual meter reading received from the distributors' bill file and the Daily Cumulative Meter file, which is used to pass data to the load settlement system. Phase II includes consumption alignment design, testing, training, and updates to DERS' policies and processes.

## **2.3 Phase III – Alberta Tariff Billing Code**

Phase II of the RDS Project is proposed specifically to comply with the TBC, summarized in the table below.

### Phase III – Alberta Tariff Billing Code Description

Description	RDS Project, Phase III
Publish and maintain a tariff calendar	DERS will align its billing calendar with ATCO’s Scheduled Tariff Bill File Publish Dates.
Publish and maintain site-cycle assignments	Enable DERS to accept daily bill cycle assignment changes from ATCO.
Tariff Bill File content	Enable DERS to accept the TBC defined standardized file format and enforce production rules for each record type.
Tariff Bill File Event and Tariff Bill Period Event	Enable DERS to: accept and store off-cycle data from ATCO; automatically generate disputed tariff transactions; utilize header records; and accommodate distribution tariff price and rate code changes.
Usage Period Event and Charge Period Event	Enable DERS to accept and process split distribution charge periods and charges and higher record volumes/site.
Cancel/re-bill and one-time charges	Enable DERS to accept and process cancel-re-bills in the new file format; match/accept/reject cancel records with original records; change database to record and display cancel record IDs.
Provision of billing data	Enable DERS to accept and process tariff bill file start and end date presentation in the new format.
Validation rules	Enable DERS to use the values and rules for validation of the tariff bill file, and generate and process a tariff bill file acknowledgement/reject.
Tariff Bill Reject Notification (TRN)	Enable DERS to accept and process the TRN transaction, and generate Tariff Bill Dispute transactions.
Wire Owner invoice	DERS will modify control and balancing procedures to reconcile with the Tariff Bill File.
Performance monitoring	Enable DERS to reflect the following measurements: 2.0 Standard file format validation timing, 5.0 Standard file content validation timing, and 4.0 Report file rejections. (Only these TBC Performance Requirements and Performance Monitoring Metrics apply to DERS at this time.)
Adjustments for pre-implementation charges	Enable DERS to process pre and post -implementation adjustment transactions.
Production cut-over, historical data archive and purge processes	DERS and ATCO will cut-over to the new processes and transactions concurrently.

## 2.4 Project Cost Description

DERS has arranged for ATCO I-Tek to undertake and manage the RDS Project at a project capital cost of \$1.3 million, with ongoing operating costs of \$8,100 (plus annual inflation), as detailed below. DERS is proposing to allocate these costs between DRT and RRT based on customer count.

### RDS Project Cost Description

Cost Description	2005 Forecast Cost (\$000)	2006 Forecast Cost (\$000)
<b>Phase I Capital Costs <sup>(1)</sup></b>		
Bill Period alignment and Bill statement format changes	\$56.0	
Co-ordinate with ATCO systems and processes; testing	37.2	
Phase I subtotal	93.2	
<b>Phase II Capital Costs</b>		
Co-ordinate with ATCO systems and processes; testing	184.0	
Training; update policies and processes	61.0	
Charge cycle alignment	8.0	
Phase II subtotal	253.0	
<b>Phase III Capital Costs</b>		
Tariff Bill code Requirements as set out in section 2.3, above		\$794.1
Implementation		\$182.7
Phase III subtotal		\$976.8
<b>Total Capital Costs</b>	<b>\$346.2</b>	<b>\$976.8</b>
<b>Operating Costs</b>		
<b>Total Operating Costs</b>	<b>\$4.1</b>	<b>\$8.3</b>
<b>Total Forecast Cost</b>	<b>\$350.3</b>	<b>\$985.1</b>

(1) Phase I was completed in October 2004 but was not included in DERS' 2004 revenue requirement.

## **2.5 Project Cost Assumptions**

For the purposes of this business case, DERS has made the following general project cost assumptions.

- In-service dates: Phase I December 31, 2004; Phase II March 31, 2005; Phase III January 31, 2005. Phase III is subject to market transition planning in respect of the TBC and may change from January 31, 2006 expected in-service-date.
- Operating Cost start date: July 1, 2005
- Operating Cost Inflation: 2.0% through 2009.
- Discount rate for net present value calculations: 10.1%, based on the applied for return on working capital in DERS' 2005-2006 DRT and RRT Applications, prorated between DRT and RRT on the basis of forecast 2005 customer count.
- Allocation between DRT and RRT based on customer count; 83.29% DRT and 16.71% RRT in 2005 and 83.32% DRT and 16.68% RRT in 2006.

## **2.6 Alternatives to the RDS Project**

DERS considers that there are three possible approaches to meeting the requirements of the RDS Regulation and the TBC:

1. The distributor would provide all billing components to DERS. DERS did not consider this option viable as DERS would surrender its ability to determine energy charges, while retaining its obligations associated with bill statements, bill accuracy and customer care.

2. DERS would calculate all bill line items including the delivery charges. DERS did not consider this option viable as it would have required costly system development to accommodate calculation of multiple, changing tariff structures.
3. The RDS Project which is a collaborative effort between DERS and the distributor based on common input data. DERS considers this to be the preferred approach particularly as it is supported by ATCO I-Tek's current billing structure.

### 3 Financial Metrics

#### 3.1 Analysis Period

This business case covers the full five year period from 2005-2009 in respect of cash flow analysis and 2005-2006 in respect of revenue requirement impact.

#### 3.2 Revenue Requirement

The RDS Project will result in an overall revenue requirement increase, as shown in the table below. The calculation of incremental revenue requirement accords with those methods used in DERS' 2005-2006 DRT and RRT Application and is segregated into working capital carrying costs, amortization, and operating expense, allocated to the DRT and RRT.

**RDS Project Incremental 2005 -2006 Revenue Requirement**

Incremental Revenue Requirement	DRT		RRT	
	2005 (\$000)	2006 (\$000)	2006 (\$000)	2007 (\$000)
Working Capital Carrying Costs	23.6	96.7	4.7	19.4
Amortization	28.8	206.9	5.8	41.4
Operating Expense	3.4	6.9	0.7	1.4
<b>Total Revenue Requirement</b>	<b>\$55.8</b>	<b>\$310.5</b>	<b>\$10.5</b>	<b>\$60.8</b>

### 3.3 Cash Flow

This analysis includes incremental cash flow estimates in C\$000 for each year of the analysis period. The discount rate for net present value calculations is assumed to be 10.1% in each year of the 2005-2009 analysis period. The discount rate represents a blended rate for DRT and RRT, pro-rated by customer count and calculated as:

DRT working capital carrying cost rate of 10.19% multiplied by 83.29%

*Plus*

RRT working capital carrying cost rate of 9.7% multiplied by 16.71%.

#### RDS Project Cash Flow and Net Present Value

	Incremental Cash Flow in \$000					
	2005	2006	2007	2008	2009	Total
<b>Cash Flow Summary</b>						
Capital Expenditures	(346)	(977)	0	0	0	(1,323)
Operating Expense	(4)	(8)	(8)	(9)	(9)	(38)
<b>Total Cash Outflows</b>	<b>(350)</b>	<b>(985)</b>	<b>(8)</b>	<b>(9)</b>	<b>(9)</b>	<b>(1,361)</b>
<b>Net Present Value</b>						
Discounted Cash Flow Stream	(318)	(813)	(6)	(6)	(5)	(1,148)

### **3.4 Sensitivity Analysis**

A 10% increase or reduction in the estimated RDS Project cost would have a similar effect on 2005-2006 revenue requirement and net present value. The Phase III in-service-date is subject to various stakeholders to the Tariff Billing Code; a delayed in-service-date for Phase III of the RDS Project would reduce amortization by approximately \$16,000 for each month of delay; working capital carrying costs would also be reduced depending on the number of months delayed.

## **4 Conclusions and Recommendations**

Based on the information provided herein, DERS recommends proceeding with the RDS Project. The RDS Project has been designed to comply with certain requirements of the TBC and the RDS Regulation in a cost-effective manner.

**RDS BUSINESS CASE****SUPPLEMENT A****Direct Energy Marketing Limited's Tariff Billing Code Compliance Plan****October 29, 2004**

In respect to the implementation of the Alberta Tariff Billing Code Version 1.0, this document shall serve as the compliance plan as per Section 6.1 of the Tariff Billing Code (the "Code") and will be updated in accordance with the Code.

Direct Energy Regulated Services ("DERS") is a business unit of Direct Energy Marketing Limited and therefore Direct Energy Marketing Limited submits the following compliance plan on behalf of DERS. DERS performs the role of the Regulated Rate Tariff provider in the ATCO Electric service territory and is aware of, and understands, its Code obligations.

The Code establishes the standards for communicating site-specific distribution and transmission tariff charges and usage information relevant to calculating energy charges in a standardized format for the operation of an efficient, fair, and openly competitive electricity market in Alberta. These obligations arise through the *Electric Utilities Act* and the Regulated Default Supply Regulation ("RDS"). The RDS is the regulation made pursuant to the *Electric Utilities Act* that addresses issues related to the sharing of tariff bill ready information between wire owners and retailers and is relevant to the Tariff Billing Code. The Code sets the minimum obligations a wire owner, under the Board's jurisdiction, must meet to provide timely and accurate tariff bill ready information to retailers for distribution and system access service provided by the wire owner to the retailer.

At present, this Code applies to electricity only. In anticipation of the continued convergence of the retail electric and natural gas markets, this Code has been designed to accommodate the exchange of information for the retail natural gas market.

**Business Assumptions**

DERS intends to comply with the Code, however the implementation timelines as stated in the Code cannot be met at this time. DERS will rely on its affiliated wire owner, ATCO Electric, for the provision of information as specified in the Code and therefore the DERS implementation and certification timelines will mirror those of ATCO Electric.

DERS has opted to manage the RDS unit price change internally and therefore will not require ATCO Electric to create a Tariff Billing Period transaction for such an event. The exemption request is noted below.

### **Exemption Request**

ATCO Electric and DERS have reached a bilateral agreement to process a Usage Period Event when an RRT energy price change occurs. DERS' retail billing system is currently equipped to calculate a usage split when an RRT energy price change occurs and therefore would not benefit from a transaction processed by the Wire Owner. As such, it is not necessary for ATCO Electric to build that functionality at this time.

DERS requests an exemption from processing a Usage Period Event as per Table 3-1 of the Tariff Billing Code 1.0 (Tariff Billing Events, when an RRT energy price change occurs).

### **Customer Bill production in the event that a tariff charge is not received**

DERS will continue its current process for billing tariff charges in the event they are not received from a Wire Owner. DERS' billing agent, ATCO I-Tek, utilizes a table driven calculation that reflects a customer's estimated annual consumption multiplied by the appropriate Wire Owner rates. This provides an acceptable estimate in the event that a tariff charge is not received. Once an actual charge has been received by DERS from the Wire Owner, the estimate is reversed in full and is replaced by the actual charges.

### **Implementation Schedule**

#### **Regulated Default Supply Compliance:**

- a) Billing Period Alignment Sept 2004 (*Completed*)
- b) Billing Cycle Change Alignment Oct 2004
- c) Billing Consumption Alignment March 2005

Remaining Tariff Billing Code Requirements

The remaining deliverables and required testing will mirror ATCO Electric's timeline and the expected completion dated provided by ATCO Electric is October 2005. This would include the requirements for reporting the Tariff Billing Code performance metrics.

**Training**

The following training assumptions have been made in regards to training of ATCO I-Tek resources, acting on behalf of DERS in customer care and billing services:

Customer representatives and billing support staff will be trained on the impact of the Tariff Billing Code and the new procedures,

Customer representatives will be trained on responding to customer queries regarding the distribution charges.

**Authority Accountable for Compliance of the Code**

Robert Hemstock  
Vice-President, Government & Regulatory Affairs  
Western Region  
Direct Energy Marketing Limited  
1000, 111 – 5<sup>th</sup> Ave  
Calgary, Alberta T2P 3Y6  
Phone: (403) 290-8863  
Fax: (403) 290-4644  
Email: robert.hemstock@na.centrica.com