Schema Design – Reports

GDAR Design

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Revision History

Date	Version	Description	Author
October 3, 2003	0.1	Initial Creation	Michael Benovich, Sapient Corporation
October 4, 2003	0.2	Internal Review revisions	Vu Pham-Tran, Sapient Corporation
October 5,	0.3	Business Descriptions added	Vu Pham-Tran, Sapient Corporation
October 7,	0.4	Schema Changes applied and examples updated to appendix	Vu Pham-Tran, Sapient Corporation

1 Schema Specifications – Monthly Account Activity

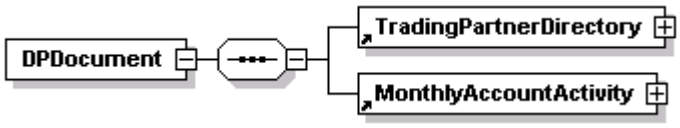
The following is a list of element and attribute specifications for the XML schema. It will contain formatting constraints, type values, layout and any additional information such as the applicable business uses for the fields.

1.1 DPDocument

Description

This is the root element of the transaction request and contains attributes that describe the XML document and the type of transaction that the XML document represents.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ None
Child Elements	▪ TradingPartnerDirectory ▪ MonthlyAccountActivity
Type	xs:complexType
Facets	N/A

Source Design	

```
<xs:element name="DPDocument">
 <xs:complexType>
  <xs:sequence>
   <xs:element ref="TradingPartnerDirectory"/>
   <xs:element ref="MonthlyAccountActivity"/>
  </xs:sequence>
  <xs:attribute name="Version" use="required">
   <xs:simpleType>
    <xs:restriction base="xs:decimal">
     <xs:minInclusive value="0.0"/>
     <xs:maxInclusive value="99999999.99"/>
     <xs:fractionDigits value="3"/>
    </xs:restriction>
   </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="DocumentDefinitionName" use="required">
   <xs:simpleType>
    <xs:restriction base="xs:NMTOKEN">
     <xs:enumeration value="MonthlyAccountActivity"/>
    </xs:restriction>
   </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="DistributorDocumentReference" type="xs:string" use="optional"/>
  <xs:attribute name="CreationDate" type="xs:date" use="required"/>
 </xs:complexType>
</xs:element>
```

Attribute Specifications

Name	Type	Usage	Facets	Description
Version	xs:decimal	Required	N/A	The version of the XML schema that corresponds to this document. Currently, the version of this schema is 1.2
DocumentDefinitionName	xs:NMTOKEN	Required	Enum	The value contained for this attribute must be equivalent to the body element of the schema. For example, this schema requires that the value be: *MonthlyAccountActivity*
DistributorDocumentReference	xs:string	Optional	N/A	This is the distributor's document tracking identifier of the report document. It will only be populated by Union Gas.
CreationDate	xs:date	Required	YYYY-	This is the creation date of

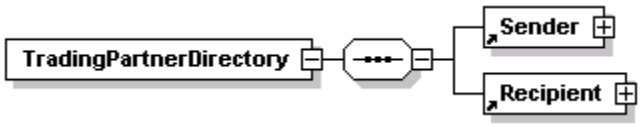
			MM-DD	the document.

1.1.1 TradingPartnerDirectory

Description

This is the header information containing the information on the parties involved in the transmission of the document.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ DPDocument
Child Elements	▪ Sender ▪ Recipient
Type	xs:complexType
Facets	N/A
Source Design	<xs:element name="TradingPartnerDirectory"> <xs:complexType> <xs:sequence> <xs:element ref="Sender"/> <xs:element ref="Recipient"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

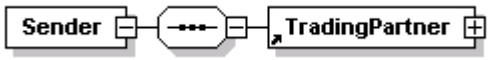
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.1.1 Sender

Description

This element contains information of the sender of the document. For this schema, the information belongs to the Distributor.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ TradingPartnerDirectory
Child Elements	▪ TradingPartner
Type	xs:complexType
Facets	
Source Design	<xs:element name="Sender"> <xs:complexType> <xs:sequence> <xs:element ref="TradingPartner"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

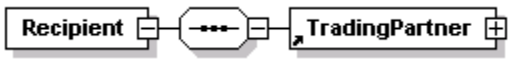
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.1.2 Recipient

Description

This element contains information of the recipient of the document. For this schema, the information belongs to the Vendor.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ TradingPartnerDirectory
Child Elements	▪ TradingPartner
Type	xs:complexType
Facets	
Source Design	<xs:element name="Recipient"> <xs:complexType> <xs:sequence> <xs:element ref="TradingPartner"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

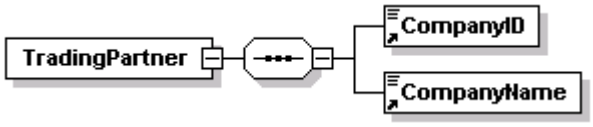
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.1.2.1 TradingPartner

Description

This element contains information of the sendor or recipient of the document. For this schema, the sendor information belongs to the Gas Distributor and the recipient information belongs to the Vendor.

Layout



Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Recipient ▪ Sender
Child Elements	▪ CompanyID ▪ CompanyName
Type	xs:complexType
Facets	
Source Design	<xs:element name="TradingPartner"> <xs:complexType> <xs:sequence> <xs:element ref="CompanyID"/> <xs:element ref="CompanyName"/> </xs:sequence> <xs:attribute name="ParticipantType" use="required"> <xs:simpleType> <xs:restriction base="xs:NMTOKEN"> <xs:enumeration value="Distributor"/> <xs:enumeration value="Retailer"/> </xs:restriction> </xs:simpleType> </xs:attribute> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
ParticipantType	xs:NMTOKEN	Required	Enum	The role that the particular party plays in the submission.

				For this schema, the Sender's ParticipantType = "*Distributor*" and the Recipient's ParticipantType = "*Retailerr*".

1.1.1.2.1.1 CompanyID

Description

This element contains the unique identifier of the company identified by the TradingPartner. If the TradingPartner is the sender of the document for this particular schema type, the value listed is the Distributor's identifier for the Vendor.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ TradingPartner
Child Elements	▪ None
Type	xs:string
Facets	
Source Design	<xs:element name="CompanyID"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.1.2.1.2 CompanyName

Description

This element contains the company's name, either the Vendor if it is the Recipient for this document type or the Distributor if is the Sender for this document type.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ TradingPartner
Child Elements	▪ None
Type	xs:string
Facets	▪ minLength = 1 ▪ maxLength = 300
Source Design	<xs:element name="CompanyName"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="1"/> <xs:maxLength value="300"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

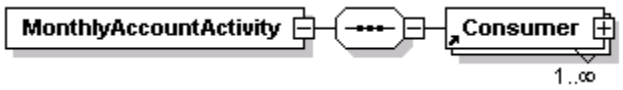
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2 MonthlyAccountActivity

Description

This is the body element of the report. It contains the transaction specific information record(s) that will appear inside the body.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ DPDocument
Child Elements	▪ Consumer
Type	xs:complexType
Facets	N/A
Source Design	<xs:element name="MonthlyAccountActivity"> <xs:complexType> <xs:sequence> <xs:element ref="Consumer" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

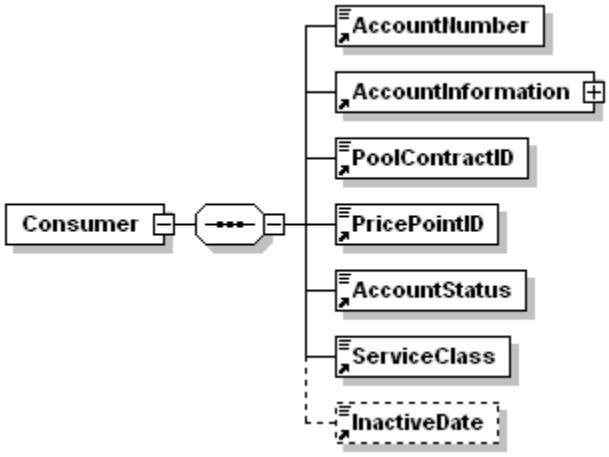
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1 Consumer

Description

This is the container element for pertaining to each consumer account belonging to the Vendor.

Layout



Element Specifications

Usage	Requried - Unbounded
Parent Elements	▪ MonthlyAccountActivity
Child Elements	▪ AccountNumber ▪ AccountInformation ▪ AccountStatus ▪ ServiceClass ▪ InactiveDate
Type	xs:complexType
Facets	N/A

Source Design	<xs:element name="Consumer"> <xs:complexType> <xs:sequence> <xs:element ref="AccountNumber"/> <xs:element ref="AccountInformation"/> <xs:element ref="PoolContractID"/> <xs:element ref="PricePointID"/> <xs:element ref="AccountStatus"/> <xs:element ref="ServiceClass"/> <xs:element ref="InactiveDate" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.1 AccountNumber

Description

This is the unique identifier of the account.

Layout

Element Specifications

Usage	
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:string
Facets	▪ minLength = 6 ▪ maxLength = 14
Source Design	<xs:element name="AccountNumber"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="6"/> <xs:maxLength value="14"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

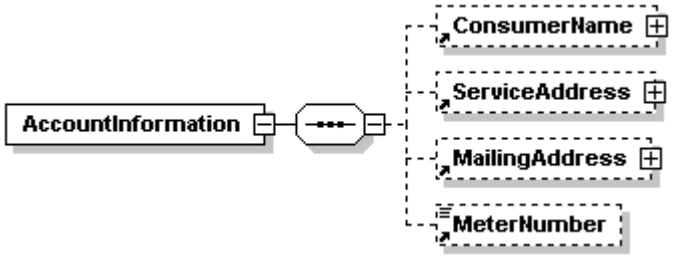
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2 AccountInformation

Description

This element is a container for consumer specific information such as the service and mailing addresses.

Layout



Element Specifications

Usage	
Parent Elements	▪ Consumer
Child Elements	▪ ConsumerName ▪ ServiceAddress ▪ MailingAddress ▪ MeterNumber
Type	xs:complexType
Facets	
Source Design	<xs:element name="AccountInformation"> <xs:complexType> <xs:sequence> <xs:element ref="ConsumerName" minOccurs="0"/> <xs:element ref="ServiceAddress" minOccurs="0"/> <xs:element ref="MailingAddress" minOccurs="0"/> <xs:element ref="MeterNumber" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

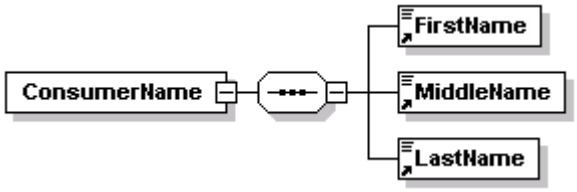
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.1 ConsumerName

Description

This is the container element for the consumer name information.

Layout



Element Specifications

Usage	Optional – Once Maximum
Parent Elements	▪ AccountInformation
Child Elements	▪ FirstName ▪ MiddleName ▪ LastName
Type	xs:complexType
Facets	
Source Design	<xs:element name="ConsumerName"> <xs:complexType> <xs:sequence> <xs:element ref="FirstName"/> <xs:element ref="MiddleName"/> <xs:element ref="LastName"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.1.1 FirstName

Description

This is the first name of the consumer as it appears in the Distributor's repository. It is left blank if the consumer is a company.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ ConsumerName
Child Elements	▪ None

Type	xs:string
Facets	▪ minLength = 0 ▪ maxLength = 100
Source Design	<xs:element name="FirstName"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.1.2 MiddleName

Description

This is the middle name of the consumer as it appears in the Distributor's repository. It is left blank if the consumer is a company.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ ConsumerName
Child Elements	▪ None
Type	xs:string
Facets	▪ minLength = 0 ▪ maxLength = 100
Source Design	<xs:element name="MiddleName"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.1.3 LastName

Description

This is the last name of the consumer as it appears in the Distributor's repository. When the consumer is a company, the company name is listed here.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ ConsumerName
Child Elements	▪ None
Type	xs:string
Facets	▪ minLength = 0 ▪ maxLength = 100
Source Design	<xs:element name="LastName"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

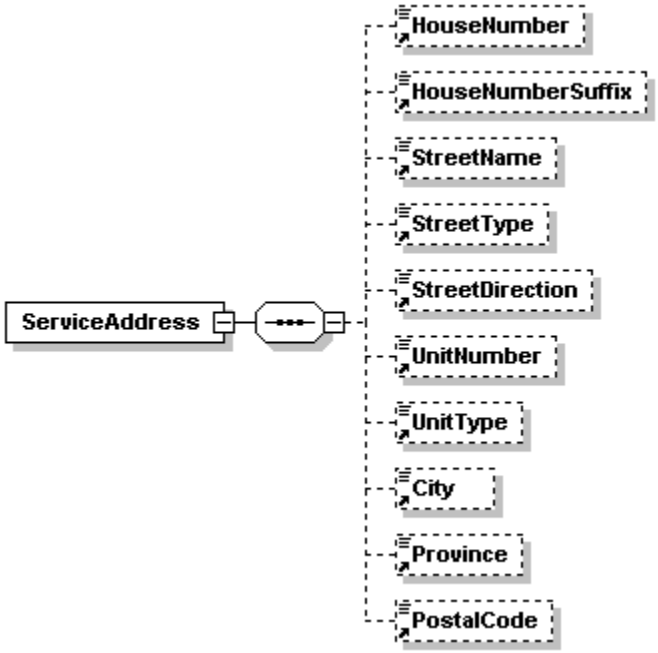
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2 ServiceAddress

Description

This is the container element for the consumer's address of service (premises address).

Layout



Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ AccountInformation
Child Elements	▪ HouseNumber ▪ HouseNumberSuffix ▪ StreetName ▪ StreetType ▪ StreetDirection ▪ UnitNumber ▪ UnitType ▪ City ▪ Province ▪ PostalCode
Type	xs:complexType
Facets	N/A

Source Design	<xs:element name="ServiceAddress"> <xs:complexType> <xs:sequence> <xs:element ref="HouseNumber" minOccurs="0"/> <xs:element ref="HouseNumberSuffix" minOccurs="0"/> <xs:element ref="StreetName" minOccurs="0"/> <xs:element ref="StreetType" minOccurs="0"/> <xs:element ref="StreetDirection" minOccurs="0"/> <xs:element ref="UnitNumber" minOccurs="0"/> <xs:element ref="UnitType" minOccurs="0"/> <xs:element ref="City" minOccurs="0"/> <xs:element ref="Province" minOccurs="0"/> <xs:element ref="PostalCode" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.1 HouseNumber

Description

Lists the consumer's house number of the service address. This conforms to the Canada Post Address standards (referred to as civic number).

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 10
Source Design	<xs:element name="HouseNumber"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="10"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

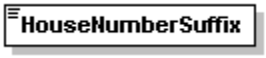
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.2 HouseNumberSuffix

Description

Lists the consumer's house number suffix of the service address. This conforms to the Canada Post Address standards.

Layout



Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 10
Source Design	<xs:element name="HouseNumberSuffix"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="10"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.3 StreetName

Description

Lists the consumer's street name of the service address. This conforms to the Canada Post Address standards.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 55
Source Design	<xs:element name="StreetName"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="55"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.4 StreetType

Description

Lists the consumer's street type of the service address. This conforms to the Canada Post Address standards.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 10

Source Design	<xs:element name="StreetType"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="10"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.5 StreetDirection

Description

Lists the consumer's street direction of the service address. This conforms to the Canada Post Address standards.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:NMTOKEN
Facets	Enumeration ▪ N ▪ S ▪ W ▪ E ▪ NW ▪ SW ▪ SE

Source Design	<xs:element name="StreetDirection"> <xs:simpleType> <xs:restriction base="xs:NMTOKEN"> <xs:enumeration value="N"/> <xs:enumeration value="S"/> <xs:enumeration value="W"/> <xs:enumeration value="E"/> <xs:enumeration value="NW"/> <xs:enumeration value="NE"/> <xs:enumeration value="SW"/> <xs:enumeration value="SE"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.6 UnitNumber

Description

Lists the consumer's unit (apartment) number of the service address. This conforms to the Canada Post Address standards.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 40
Source Design	<xs:element name="UnitNumber"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="40"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.7 UnitType

Description

Lists the consumer's unit type (such as APT, SUITE) of the service address. This conforms to the Canada Post Address standards.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 10
Source Design	<xs:element name="UnitType"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="10"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

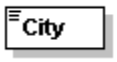
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.8 City

Description

Lists the consumer's city of the service address.

Layout



Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 20
Source Design	<xs:element name="City"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="20"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.9 Province

Description

Lists the consumer's province of the service address. For Enbridge Gas Distribution and Union Gas Limited, the only value that will be used is "*ON*".

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress
Child Elements	▪ None
Type	xs:NMTOKEN

Facets	Enumeration ▪ AB ▪ BC ▪ MB ▪ NB ▪ NL ▪ NS ▪ ON ▪ PE ▪ QC ▪ SK ▪ YT
Source Design	<xs:element name="Province"> <xs:simpleType> <xs:restriction base="xs:NMTOKEN"> <xs:enumeration value="AB"/> <xs:enumeration value="BC"/> <xs:enumeration value="MB"/> <xs:enumeration value="NB"/> <xs:enumeration value="NL"/> <xs:enumeration value="NS"/> <xs:enumeration value="ON"/> <xs:enumeration value="PE"/> <xs:enumeration value="QC"/> <xs:enumeration value="SK"/> <xs:enumeration value="YT"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.2.10 PostalCode

Description

Lists the consumer's Postal Code of the service address.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ ServiceAddress

Child Elements	▪ None
Type	xs:string
Facets	\p{Lu}\p{Nd}\p{Lu}\p{Nd}\p{Lu}\p{Nd} → C#C#C# (no spaces)
Source Design	<xs:element name="PostalCode"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:pattern value="\p{Lu}\p{Nd}\p{Lu}\p{Nd}\p{Lu}\p{Nd}"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

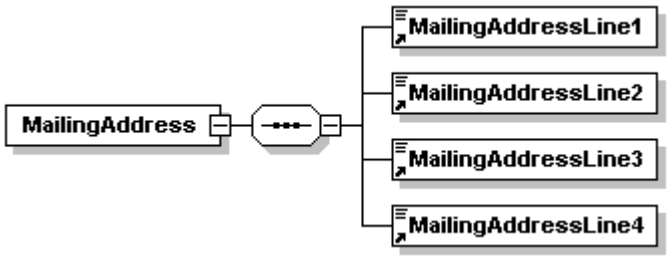
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.3 MailingAddress

Description

Lists the consumer's mailing address information.

Layout



Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ AccountInformation
Child Elements	▪ MailingAddressLine1 ▪ MailingAddressLine2 ▪ MailingAddressLine3 ▪ MailingAddressLine4
Type	xs:complexType
Facets	N/A

Source Design	<xs:element name="MailingAddress"> <xs:complexType> <xs:sequence> <xs:element ref="MailingAddressLine1"/> <xs:element ref="MailingAddressLine2"/> <xs:element ref="MailingAddressLine3"/> <xs:element ref="MailingAddressLine4"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.3.1 MailingAddressLine1

Description

This contains the first line of the mailing address of the consumer.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ MailingAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 100
Source Design	<xs:element name="MailingAddressLine1"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.3.2 MailingAddressLine2

Description

This contains the second line of the mailing address of the consumer.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ MailingAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 100
Source Design	<xs:element name="MailingAddressLine2"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.3.3 MailingAddressLine3

Description

This contains the third line of the mailing address of the consumer.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ MailingAddress
Child Elements	▪ None

Type	xs:string
Facets	Min Length = 0; Max Length = 100
Source Design	<xs:element name="MailingAddressLine3"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.3.4 MailingAddressLine4

Description

This contains the fourth line of the mailing address of the consumer. For Union Gas, this element is empty.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ MailingAddress
Child Elements	▪ None
Type	xs:string
Facets	Min Length = 0; Max Length = 100
Source Design	<xs:element name="MailingAddressLine4"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="100"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.2.4 MeterNumber

Description

This is the meter number as listed in the Distributor's repository.

Layout

Element Specifications

Usage	Optional – Once Maximum (per parent element)
Parent Elements	▪ AccountInformation
Child Elements	▪ None
Type	xs:string
Facets	▪ pattern = [0-9]{0,15}
Source Design	<xs:element name="MeterNumber"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:pattern value="[0-9]{0,15}"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.3 PoolContractID

Description

This lists the current contract/pool that the consumer is associated with.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:string
Facets	N/A

Source Design	<xs:element name="PoolContractID"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="40"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

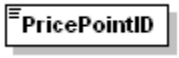
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.4 PricePointID

Description

This lists the Price Point the consumer is currently associated to.

Layout



Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:string
Facets	N/A
Source Design	<xs:element name="PricePointID"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="40"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.5 AccountStatus

Description

This lists the consumer's account activity status.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:string
Facets	N/A
Source Design	<xs:element name="AccountStatus"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.6 ServiceClass

Description

This indicates whether the consumer is an industrial, residential or commercial gas user.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent)
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:string
Facets	N/A
Source Design	<xs:element name="ServiceClass"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

1.1.2.1.7 InactiveDate

Description

This will only be filled if the account is inactive (AccountStatus element) and filled with the date on which the account became inactive. Otherwise, this element is not included.

Layout

Element Specifications

Usage	Optional – Once Maximum
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:date
Facets	YYYY-MM-DD
Source Design	<xs:element name="InactiveDate" type="xs:date"/>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2 Schema Specifications – Price Point Cross Reference

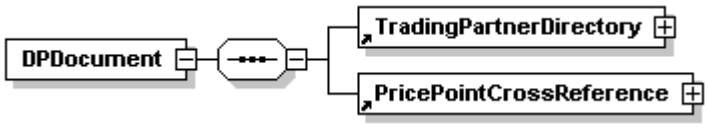
The following is a list of element and attribute specifications for the XML schema. It will contain formatting constraints, type values, layout and any additional information such as the applicable business uses for the fields.

2.1 DPDocument

Description

This is the root element of the transaction request and contains attributes that describe the XML document and the type of transaction that the XML document represents.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ None
Child Elements	▪ TradingPartnerDirectory ▪ PricePointCrossReference
Type	xs:complexType
Facets	N/A

Source Design	

```
<xs:element name="DPDocument">
 <xs:complexType>
  <xs:sequence>
   <xs:element ref="TradingPartnerDirectory"/>
   <xs:element ref="PricePointCrossReference"/>
  </xs:sequence>
  <xs:attribute name="Version" use="required">
   <xs:simpleType>
    <xs:restriction base="xs:decimal">
     <xs:minInclusive value="0.0"/>
     <xs:maxInclusive value="99999999.99"/>
     <xs:fractionDigits value="3"/>
    </xs:restriction>
   </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="DocumentDefinitionName" use="required">
   <xs:simpleType>
    <xs:restriction base="xs:NMTOKEN">
     <xs:enumeration value="PricePointCrossReference"/>
    </xs:restriction>
   </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="DistributorDocumentReference" type="xs:string" use="optional"/>
  <xs:attribute name="CreationDate" type="xs:date" use="required"/>
 </xs:complexType>
</xs:element>
```

Attribute Specifications

Name	Type	Usage	Facets	Description
Version	xs:decimal	Required	N/A	The version of the XML schema that corresponds to this document. Currently, the version of this schema is 1.2
DocumentDefinitionName	xs:NMTOKEN	Required	Enum	The value contained for this attribute must be equivalent to the body element of the schema. For example, this schema requires that the value be: *PricePointCrossReference*
DistributorDocumentReference	xs:string	Optional	N/A	This is the distributor's document tracking identifier of the report document. It will only be populated by Union Gas.
CreationDate	xs:date	Required	YYYY-	This is the creation date of

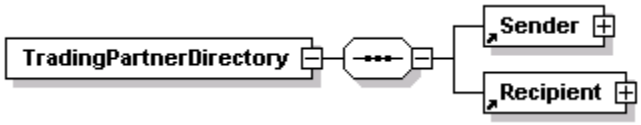
			MM-DD	the document.

2.1.1 TradingPartnerDirectory

Description

This is the header information containing the information on the parties involved in the transmission of the document.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ DPDocument
Child Elements	▪ Sender ▪ Recipient
Type	xs:complexType
Facets	N/A
Source Design	<xs:element name="TradingPartnerDirectory"> <xs:complexType> <xs:sequence> <xs:element ref="Sender"/> <xs:element ref="Recipient"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

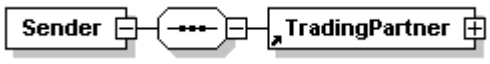
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.1.1 Sender

Description

This element contains information of the sender of the document. For this schema, the information belongs to the Distributor.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ TradingPartnerDirectory
Child Elements	▪ TradingPartner
Type	xs:complexType
Facets	
Source Design	<xs:element name="Sender"> <xs:complexType> <xs:sequence> <xs:element ref="TradingPartner"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

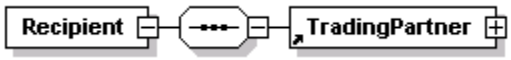
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.1.2 Recipient

Description

This element contains information of the recipient of the document. For this schema, the information belongs to the Vendor.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ TradingPartnerDirectory
Child Elements	▪ TradingPartner
Type	xs:complexType
Facets	
Source Design	<xs:element name="Recipient"> <xs:complexType> <xs:sequence> <xs:element ref="TradingPartner"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

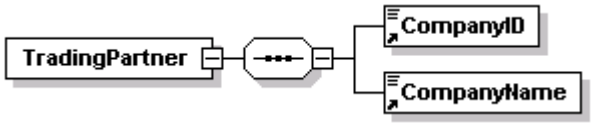
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.1.2.1 TradingPartner

Description

This element contains information of the sendor or recipient of the document. For this schema, the sendor information belongs to the Gas Distributor and the recipient information belongs to the Vendor.

Layout



Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Recipient ▪ Sender
Child Elements	▪ CompanyID ▪ CompanyName
Type	xs:complexType
Facets	
Source Design	<xs:element name="TradingPartner"> <xs:complexType> <xs:sequence> <xs:element ref="CompanyID"/> <xs:element ref="CompanyName"/> </xs:sequence> <xs:attribute name="ParticipantType" use="required"> <xs:simpleType> <xs:restriction base="xs:NMTOKEN"> <xs:enumeration value="Distributor"/> <xs:enumeration value="Retailer"/> </xs:restriction> </xs:simpleType> </xs:attribute> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
ParticipantType	xs:NMTOKEN	Required	Enum	The role that the particular party plays in the submission. For this schema, the

				Sender's ParticipantType = "*Distributor*" and the Recipient's ParticipantType = "*Retailerr*".

2.1.1.2.1.1 CompanyID

Description

This element contains the unique identifier of the company identified by the TradingPartner. If the TradingPartner is the sender of the document for this particular schema type, the value listed is the Distributor's identifier for the Vendor.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ TradingPartner
Child Elements	▪ None
Type	xs:string
Facets	
Source Design	<xs:element name="CompanyID"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.1.2.1.2 CompanyName

Description

This element contains the company's name, either the Vendor if it is the Recipient for this document type or the Distributor if is the Sender for this document type.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ TradingPartner
Child Elements	▪ None
Type	xs:string
Facets	▪ minLength = 1 ▪ maxLength = 300
Source Design	<xs:element name="CompanyName"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="1"/> <xs:maxLength value="300"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

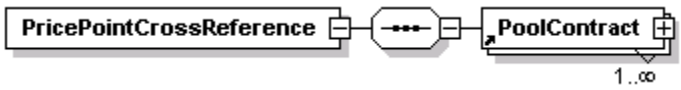
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2 PricePointCrossReference

Description

This is the body element of the report. It contains the transaction specific information record(s) that will appear inside the body.

Layout



Element Specifications

Usage	Required – Exactly Once
Parent Elements	▪ DPDocument
Child Elements	▪ PoolContract
Type	xs:complexType
Facets	N/A
Source Design	<xs:element name="PricePointCrossReference"> <xs:complexType> <xs:sequence> <xs:element ref="PoolContract" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

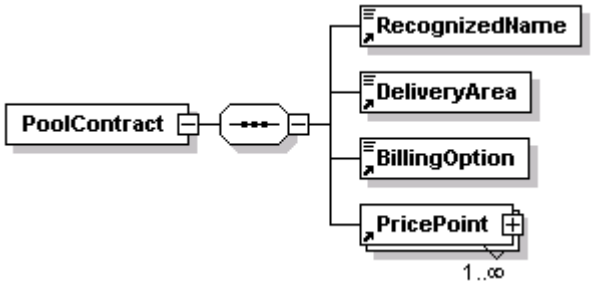
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1 PoolContract

Description

This is the container for the pool/contract's information.

Layout



Element Specifications

Usage	Required – Unbounded
Parent Elements	▪ PricePointCrossReference
Child Elements	▪ RecognizedName ▪ DeliveryArea ▪ BillingOption ▪ PricePoint
Type	xs:complexType
Facets	N/A

Source Design	<xs:element name="PoolContract"> <xs:complexType> <xs:sequence> <xs:element ref="RecognizedName"/> <xs:element ref="DeliveryArea"/> <xs:element ref="BillingOption"/> <xs:element ref="PricePoint" maxOccurs="unbounded"/> </xs:sequence> <xs:attribute name="PoolContractID"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="40"/> </xs:restriction> </xs:simpleType> </xs:attribute> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
PoolContractID	xs:string	Required	Min 0; Max 40;	This is the unique identifier of the Pool/Contract

2.1.2.1.1 RecognizedName

Description

This contains the pool/contract's name as defined by the Vendor.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ PoolContract
Child Elements	▪ None
Type	xs:string
Facets	N/A
Source Design	<xs:element name="RecognizedName"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

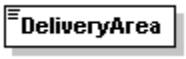
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.2 DeliveryArea

Description

This contains the delivery area for the pool/contract

Layout



Element Specifications

Usage	Required – Exactly Once (per parent)
Parent Elements	▪ PoolContract
Child Elements	▪ None
Type	xs:string
Facets	enumeration = CDA enumeration = EDA enumeration = MDA enumeration = NDA enumeration = SDA enumeration = WDA enumeration = SOU
Source Design	<xs:element name="DeliveryArea"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:enumeration value="CDA"/> <xs:enumeration value="EDA"/> <xs:enumeration value="MDA"/> <xs:enumeration value="NDA"/> <xs:enumeration value="SDA"/> <xs:enumeration value="WDA"/> <xs:enumeration value="SOU"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.3 BillingOption

Description

This indicates the billing option of the pool/contract.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ PoolContract
Child Elements	▪ None
Type	xs:string
Facets	N/A
Source Design	<xs:element name="BillingOption"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

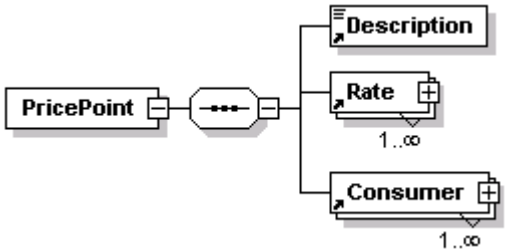
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4 PricePoint

Description

This is the container for price point information.

Layout



Element Specifications

Usage	Required – Unbounded
Parent Elements	▪ PoolContract
Child Elements	▪ Description ▪ Rate ▪ Consumer

Type	xs:complexType
Facets	N/A
Source Design	<xs:element name="PricePoint"> <xs:complexType> <xs:sequence> <xs:element ref="Description"/> <xs:element ref="Rate" maxOccurs="unbounded"/> <xs:element ref="Consumer" maxOccurs="unbounded"/> </xs:sequence> <xs:attribute name="PricePointID"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="40"/> </xs:restriction> </xs:simpleType> </xs:attribute> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
PricePointID	xs:string	Required	Min 0; Max 40;	This is the unique identifier for the price point.

2.1.2.1.4.1 Description

Description

This is the description of the price point as defined by the Vendor. If would be empty if the Vendor had not specified a description.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ PricePoint
Child Elements	▪ None
Type	xs:string
Facets	N/A
Source Design	<xs:element name="Description"> <xs:simpleType> <xs:restriction base="xs:string"/> </xs:simpleType> </xs:element>

Attribute Specifications

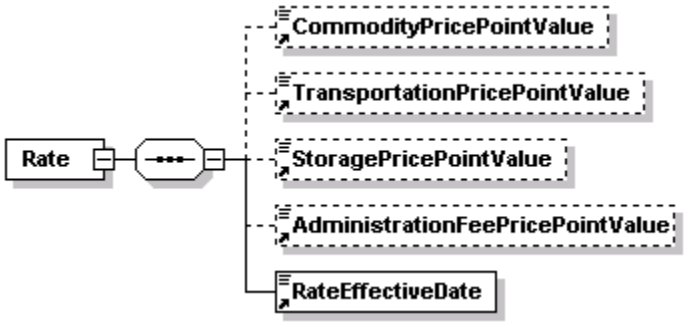
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.2 Rate

Description

This is the container element for the rates of the price point.

Layout



Element Specifications

Usage	Required – Unbounded
Parent Elements	▪ PricePoint
Child Elements	▪ CommodityPricePointValue ▪ TransportationPricePointValue ▪ StoragePricePointValue ▪ AdministrationFeePricePointValue ▪ RateEffectiveDate
Type	xs:complexType
Facets	N/A
Source Design	<xs:element name="Rate"> <xs:complexType> <xs:sequence> <xs:element ref="CommodityPricePointValue" minOccurs="0"/> <xs:element ref="TransportationPricePointValue" minOccurs="0"/> <xs:element ref="StoragePricePointValue" minOccurs="0"/> <xs:element ref="AdministrationFeePricePointValue" minOccurs="0"/> <xs:element ref="RateEffectiveDate"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.2.1 CommodityPricePointValue

Description

This is the rate defined for the commodity of the gas.

Layout

Element Specifications

Usage	Optional – Maximum Once (per parent element)
Parent Elements	▪ Rate
Child Elements	▪ None
Type	xs:double
Facets	N/A
Source Design	<xs:element name="CommodityPricePointValue" type="xs:double"/>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.2.2 TransportationPricePointValue

Description

This is the rate defined for the transportation of the gas.

Layout

Element Specifications

Usage	Optional – Maximum Once (per parent element)
Parent Elements	▪ Rate
Child Elements	▪ None
Type	xs:double
Facets	N/A
Source Design	<xs:element name="TransportationPricePointValue" type="xs:double"/>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.2.3 StoragePricePointValue

Description

This is the rate for the storage of the gas.

Layout

Element Specifications

Usage	Optional – Maximum Once (per parent element)
Parent Elements	▪ Rate
Child Elements	▪ None
Type	xs:double
Facets	N/A
Source Design	<xs:element name="StoragePricePointValue" type="xs:double"/>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.2.4 AdministrationFeePricePointValue

Description

This is an additional fee that can be set for the price point rate.

Layout

Element Specifications

Usage	Optional – Maximum Once (per parent element)
Parent Elements	▪ Rate
Child Elements	▪ None
Type	xs:double
Facets	N/A
Source Design	<xs:element name="AdministrationFeePricePointValue" type="xs:double"/>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.2.5 RateEffectiveDate

Description

This is the date for which the rates are to be effective.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Rate
Child Elements	▪ None
Type	xs:date
Facets	N/A
Source Design	<xs:element name="RateEffectiveDate" type="xs:date"/>

Attribute Specifications

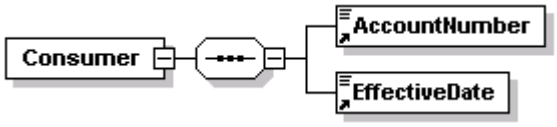
Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.3 Consumer

Description

This is the container for the consumer information elements.

Layout



Element Specifications

Usage	Required – Unbounded
Parent Elements	▪ PricePoint
Child Elements	▪ AccountNumber ▪ EffectiveDate
Type	xs:complexType
Facets	N/A

Source Design	<xs:element name="Consumer"> <xs:complexType> <xs:sequence> <xs:element ref="AccountNumber"/> <xs:element ref="EffectiveDate"/> </xs:sequence> </xs:complexType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.3.1 AccountNumber

Description

This is the unique identifier for the account.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:string
Facets	▪ minLength = 6 ▪ maxLength = 14
Source Design	<xs:element name="AccountNumber"> <xs:simpleType> <xs:restriction base="xs:string"> <xs:minLength value="6"/> <xs:maxLength value="14"/> </xs:restriction> </xs:simpleType> </xs:element>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

2.1.2.1.4.3.2 EffectiveDate

Description

This is the date on which the consumer was effective on this price point.

Layout

Element Specifications

Usage	Required – Exactly Once (per parent element)
Parent Elements	▪ Consumer
Child Elements	▪ None
Type	xs:date
Facets	YYYY-MM-DD
Source Design	<xs:element name="EffectiveDate" type="xs:date"/>

Attribute Specifications

Name	Type	Usage	Facets	Description
N/A	N/A	N/A	N/A	N/A

3 Appendix A – Montly Account Activity Report Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified">
    <xs:element name="DPDocument">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="TradingPartnerDirectory"/>
                <xs:element ref="MonthlyAccountActivity"/>
            </xs:sequence>
            <xs:attribute name="Version" use="required">
                <xs:simpleType>
                    <xs:restriction base="xs:decimal">
                        <xs:minInclusive value="0.0"/>
                        <xs:maxInclusive value="99999999.99"/>
                        <xs:fractionDigits value="3"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:attribute>
            <xs:attribute name="DocumentDefinitionName" use="required">
                <xs:simpleType>
                    <xs:restriction base="xs:NMTOKEN">
                        <xs:enumeration value="MonthlyAccountActivity"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:attribute>
            <xs:attribute name="DistributorDocumentReference" type="xs:string" use="optional"/>
            <xs:attribute name="CreationDate" type="xs:date" use="required"/>
        </xs:complexType>
    </xs:element>
    <xs:element name="TradingPartnerDirectory">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="Sender"/>
                <xs:element ref="Recipient"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="Sender">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="TradingPartner"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="Recipient">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="TradingPartner"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="TradingPartner">
        <xs:complexType>
```

```
            <xs:sequence>
                <xs:element ref="CompanyID"/>
                <xs:element ref="CompanyName"/>
            </xs:sequence>
            <xs:attribute name="ParticipantType" use="required">
                <xs:simpleType>
                    <xs:restriction base="xs:NMTOKEN">
                        <xs:enumeration value="Distributor"/>
                        <xs:enumeration value="Retailer"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:attribute>
        </xs:complexType>
    </xs:element>
    <xs:element name="CompanyName">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="1"/>
                <xs:maxLength value="300"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="CompanyID">
        <xs:simpleType>
            <xs:restriction base="xs:string"/>
        </xs:simpleType>
    </xs:element>
    <xs:element name="MonthlyAccountActivity">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="Consumer" maxOccurs="unbounded"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="Consumer">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="AccountNumber"/>
                <xs:element ref="AccountInformation"/>
                <xs:element ref="PoolContractID"/>
                <xs:element ref="PricePointID"/>
                <xs:element ref="AccountStatus"/>
                <xs:element ref="ServiceClass"/>
                <xs:element ref="InactiveDate" minOccurs="0"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="AccountNumber">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="6"/>
                <xs:maxLength value="14"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
```

```
<xs:element name="AccountInformation">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="ConsumerName" minOccurs="0"/>
            <xs:element ref="ServiceAddress" minOccurs="0"/>
            <xs:element ref="MailingAddress" minOccurs="0"/>
            <xs:element ref="MeterNumber" minOccurs="0"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ConsumerName">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="FirstName"/>
            <xs:element ref="MiddleName"/>
            <xs:element ref="LastName"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="FirstName">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:minLength value="0"/>
            <xs:maxLength value="100"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="MiddleName">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:minLength value="0"/>
            <xs:maxLength value="100"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="LastName">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:minLength value="0"/>
            <xs:maxLength value="100"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="ServiceAddress">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="HouseNumber" minOccurs="0"/>
            <xs:element ref="HouseNumberSuffix" minOccurs="0"/>
            <xs:element ref="StreetName" minOccurs="0"/>
            <xs:element ref="StreetType" minOccurs="0"/>
            <xs:element ref="StreetDirection" minOccurs="0"/>
            <xs:element ref="UnitNumber" minOccurs="0"/>
            <xs:element ref="UnitType" minOccurs="0"/>
            <xs:element ref="City" minOccurs="0"/>
            <xs:element ref="Province" minOccurs="0"/>
```

```
                <xs:element ref="PostalCode" minOccurs="0"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="HouseNumber">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="10"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="HouseNumberSuffix">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="10"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="StreetName">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="55"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="StreetType">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="10"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="StreetDirection">
        <xs:simpleType>
            <xs:restriction base="xs:NMTOKEN">
                <xs:enumeration value="N"/>
                <xs:enumeration value="S"/>
                <xs:enumeration value="W"/>
                <xs:enumeration value="E"/>
                <xs:enumeration value="NW"/>
                <xs:enumeration value="NE"/>
                <xs:enumeration value="SW"/>
                <xs:enumeration value="SE"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="UnitNumber">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="40"/>
```

```
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="UnitType">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="10"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="City">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="20"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="Province">
        <xs:simpleType>
            <xs:restriction base="xs:NMTOKEN">
                <xs:enumeration value="AB"/>
                <xs:enumeration value="BC"/>
                <xs:enumeration value="MB"/>
                <xs:enumeration value="NB"/>
                <xs:enumeration value="NL"/>
                <xs:enumeration value="NS"/>
                <xs:enumeration value="ON"/>
                <xs:enumeration value="PE"/>
                <xs:enumeration value="QC"/>
                <xs:enumeration value="SK"/>
                <xs:enumeration value="YT"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="PostalCode">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:pattern value="\p{Lu}\p{Nd}\p{Lu}\p{Nd}\p{Lu}\p{Nd}"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="MailingAddress">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="MailingAddressLine1"/>
                <xs:element ref="MailingAddressLine2"/>
                <xs:element ref="MailingAddressLine3"/>
                <xs:element ref="MailingAddressLine4"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="MailingAddressLine1">
        <xs:simpleType>
```

```
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="100"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="MailingAddressLine2">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="100"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="MailingAddressLine3">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="100"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="MailingAddressLine4">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="100"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="MeterNumber">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:pattern value="[0-9]{0,15}"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="PoolContractID">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="40"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="PricePointID">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="40"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="AccountStatus">
        <xs:simpleType>
```

```
            <xs:restriction base="xs:string"/>
        </xs:simpleType>
    </xs:element>
    <xs:element name="ServiceClass">
        <xs:simpleType>
            <xs:restriction base="xs:string"/>
        </xs:simpleType>
    </xs:element>
    <xs:element name="InactiveDate" type="xs:date"/>
</xs:schema>
```

4 Appendix B – Price Point Cross Reference Report Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified">
    <xs:element name="DPDocument">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="TradingPartnerDirectory"/>
                <xs:element ref="PricePointCrossReference"/>
            </xs:sequence>
            <xs:attribute name="Version" use="required">
                <xs:simpleType>
                    <xs:restriction base="xs:decimal">
                        <xs:minInclusive value="0.0"/>
                        <xs:maxInclusive value="99999999.99"/>
                        <xs:fractionDigits value="3"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:attribute>
            <xs:attribute name="DocumentDefinitionName" use="required">
                <xs:simpleType>
                    <xs:restriction base="xs:NMTOKEN">
                        <xs:enumeration value="PricePointCrossReference"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:attribute>
            <xs:attribute name="DistributorDocumentReference" type="xs:string" use="optional"/>
            <xs:attribute name="CreationDate" type="xs:date" use="required"/>
        </xs:complexType>
    </xs:element>
    <xs:element name="TradingPartnerDirectory">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="Sender"/>
                <xs:element ref="Recipient"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="Sender">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="TradingPartner"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="Recipient">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="TradingPartner"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
```

```
<xs:element name="TradingPartner">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="CompanyID"/>
            <xs:element ref="CompanyName"/>
        </xs:sequence>
        <xs:attribute name="ParticipantType" use="required">
            <xs:simpleType>
                <xs:restriction base="xs:NMTOKEN">
                    <xs:enumeration value="Distributor"/>
                    <xs:enumeration value="Retailer"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:attribute>
    </xs:complexType>
</xs:element>
<xs:element name="CompanyName">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:minLength value="1"/>
            <xs:maxLength value="300"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="CompanyID">
    <xs:simpleType>
        <xs:restriction base="xs:string"/>
    </xs:simpleType>
</xs:element>
<xs:element name="PricePointCrossReference">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="PoolContract" maxOccurs="unbounded"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="PoolContract">
    <xs:complexType>
        <xs:sequence>
            <xs:element ref="RecognizedName"/>
            <xs:element ref="DeliveryArea"/>
            <xs:element ref="BillingOption"/>
            <xs:element ref="PricePoint" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attribute name="PoolContractID">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:minLength value="0"/>
                    <xs:maxLength value="40"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:attribute>
    </xs:complexType>
</xs:element>
<xs:element name="RecognizedName">
```

```
        <xs:simpleType>
            <xs:restriction base="xs:string"/>
        </xs:simpleType>
    </xs:element>
    <xs:element name="DeliveryArea">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:enumeration value="CDA"/>
                <xs:enumeration value="EDA"/>
                <xs:enumeration value="MDA"/>
                <xs:enumeration value="NDA"/>
                <xs:enumeration value="SDA"/>
                <xs:enumeration value="WDA"/>
                <xs:enumeration value="SOU"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="BillingOption">
        <xs:simpleType>
            <xs:restriction base="xs:string"/>
        </xs:simpleType>
    </xs:element>
    <xs:element name="PricePoint">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="Description"/>
                <xs:element ref="Rate" maxOccurs="unbounded"/>
                <xs:element ref="Consumer" maxOccurs="unbounded"/>
            </xs:sequence>
            <xs:attribute name="PricePointID">
                <xs:simpleType>
                    <xs:restriction base="xs:string">
                        <xs:minLength value="0"/>
                        <xs:maxLength value="40"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:attribute>
        </xs:complexType>
    </xs:element>
    <xs:element name="Description">
        <xs:simpleType>
            <xs:restriction base="xs:string"/>
        </xs:simpleType>
    </xs:element>
    <xs:element name="Rate">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="CommodityPricePointValue" minOccurs="0"/>
                <xs:element ref="TransportationPricePointValue" minOccurs="0"/>
                <xs:element ref="StoragePricePointValue" minOccurs="0"/>
                <xs:element ref="AdministrationFeePricePointValue" minOccurs="0"/>
                <xs:element ref="RateEffectiveDate"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
```

```
    <xs:element name="CommodityPricePointValue" type="xs:double"/>
    <xs:element name="TransportationPricePointValue" type="xs:double"/>
    <xs:element name="StoragePricePointValue" type="xs:double"/>
    <xs:element name="AdministrationFeePricePointValue" type="xs:double"/>
    <xs:element name="RateEffectiveDate" type="xs:date"/>
    <xs:element name="Consumer">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="AccountNumber"/>
                <xs:element ref="EffectiveDate"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="AccountNumber">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:minLength value="6"/>
                <xs:maxLength value="14"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="EffectiveDate" type="xs:date"/>
</xs:schema>
```

5 Appendix D – Montly Account Activity Report XML Example

```
<?xml version="1.0" encoding="UTF-8"?>
<DPDocument Version="1.2" DocumentDefinitionName="MonthlyAccountActivity"
DistributorDocumentReference="123456789_7687683THGFTY65767" CreationDate="2004-04-03"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <TradingPartnerDirectory>
        <Sender>
            <TradingPartner ParticipantType="Distributor">
                <CompanyID>200300400</CompanyID>
                <CompanyName>Union Gas Ltd</CompanyName>
            </TradingPartner>
        </Sender>
        <Recipient>
            <TradingPartner ParticipantType="Retailer">
                <CompanyID>200300400</CompanyID>
                <CompanyName>Econogas</CompanyName>
            </TradingPartner>
        </Recipient>
    </TradingPartnerDirectory>
    <MonthlyAccountActivity>
        <Consumer>
            <AccountNumber>12345672345678</AccountNumber>
            <AccountInformation>
                <ConsumerName>
                    <FirstName>ROBERT</FirstName>
                    <MiddleName>G</MiddleName>
                    <LastName>ORR</LastName>
                </ConsumerName>
                <ServiceAddress>
                    <HouseNumber>123</HouseNumber>
                    <HouseNumberSuffix>N</HouseNumberSuffix>
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                    <StreetDirection>NW</StreetDirection>
                    <UnitNumber>400</UnitNumber>
                    <UnitType>SUITE</UnitType>
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                    <Province>ON</Province>
                    <PostalCode>A0A0A0</PostalCode>
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                    <MailingAddressLine2>SUITE 400</MailingAddressLine2>
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            <PricePointID>12345</PricePointID>
            <AccountStatus>A</AccountStatus>
```

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        </Consumer>
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            <AccountInformation>
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                    <MiddleName>A</MiddleName>
                    <LastName>HOWE</LastName>
                </ConsumerName>
                <ServiceAddress>
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    </MonthlyAccountActivity>
</DPDocument>
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6 Appendix E – Price Point Cross Reference Report XML Example

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    <TradingPartnerDirectory>
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            <TradingPartner ParticipantType="Distributor">
                <CompanyID>123456789</CompanyID>
                <CompanyName>Union Gas Ltd</CompanyName>
            </TradingPartner>
        </Sender>
        <Recipient>
            <TradingPartner ParticipantType="Retailer">
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                <CompanyName>Econogas</CompanyName>
            </TradingPartner>
        </Recipient>
    </TradingPartnerDirectory>
    <PricePointCrossReference>
        <PoolContract PoolContractID="SA1234">
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            <DeliveryArea>SOU</DeliveryArea>
            <BillingOption>ABC-TS</BillingOption>
            <PricePoint PricePointID="12345">
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                <Rate>
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                </Rate>
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</DPDocument>
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