

Ethanol Industry's Responsibility Under The RFS Program

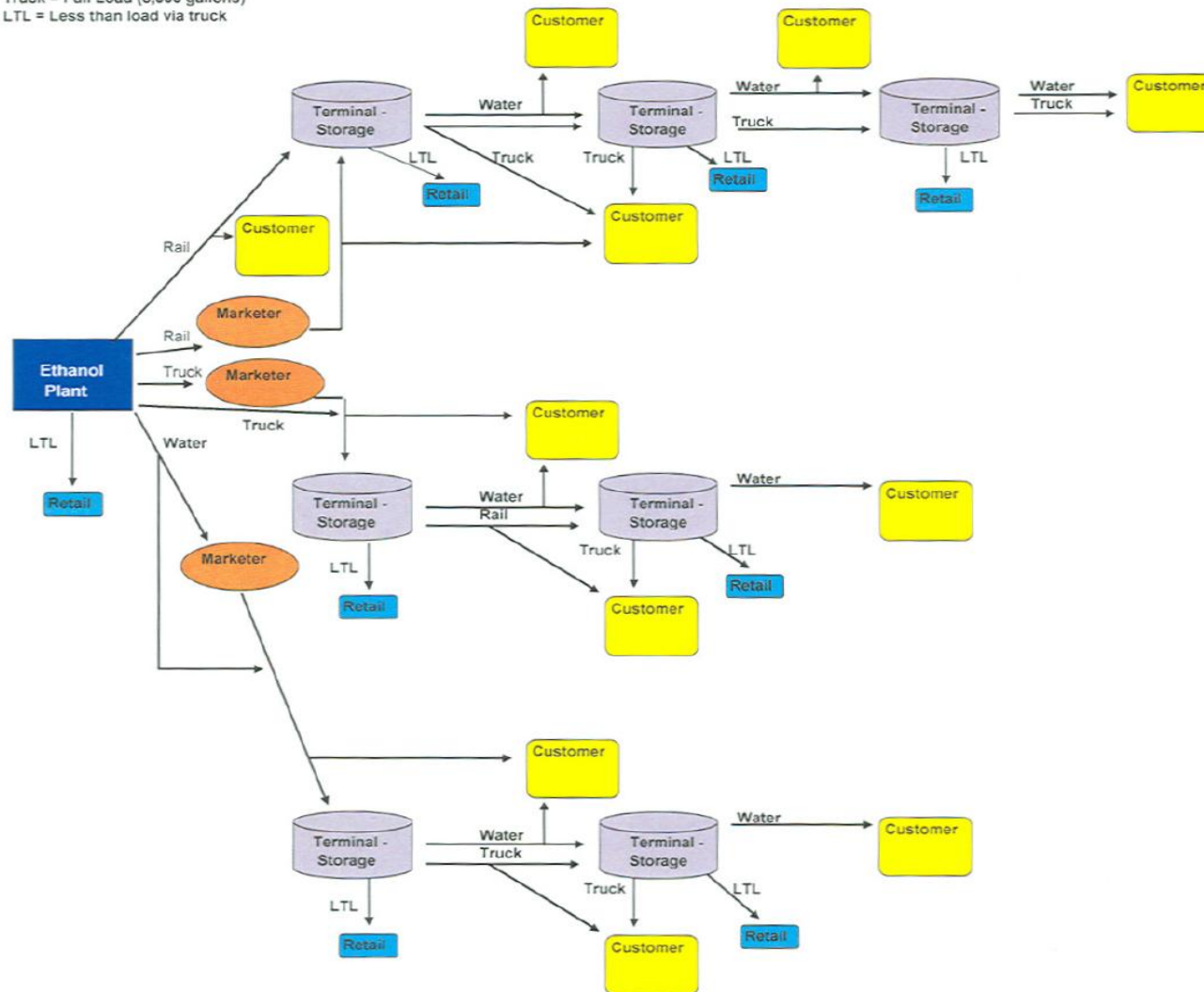
RFS Implementation Workshop
Rosslyn, Virginia
May 10, 2007
Jim Redding



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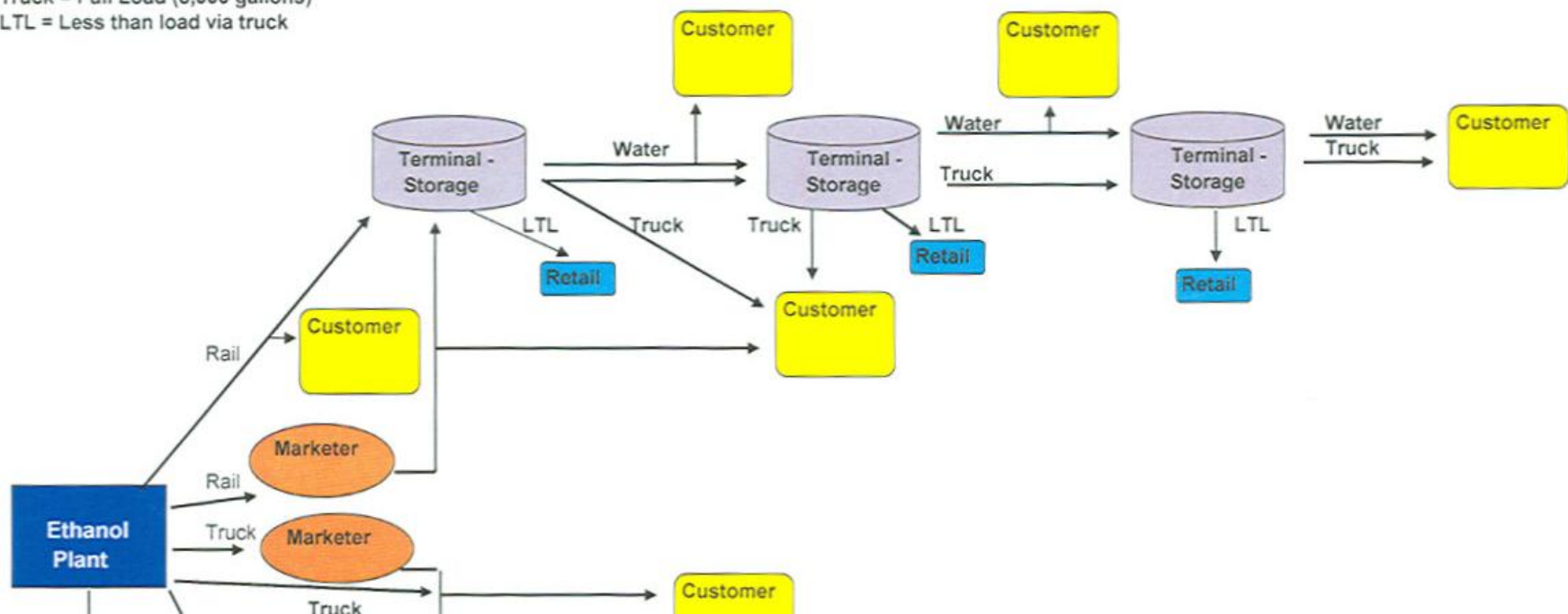
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Water = Ship/Barge
Rail = Railcar (29,000 gallons)
Truck = Full Load (8,000 gallons)
LTL = Less than load via truck



Ethanol Movement Flowchart

Water = Ship/Barge
Rail = Railcar (29,000 gallons)
Truck = Full Load (8,000 gallons)
LTL = Less than load via truck



RIN's Final Rule

- 2007
 - The compliance period is September 1 through December 31
 - First “Quarterly” reporting period will be Sept 1- Sept 30
- 2008 and after
 - The compliance period is January 1 through December 31
- September 1, 2007
 - Producer/Importer of renewable fuels may generate RIN's for inventory it owns on 9/1/07, since EPA does not dictate point of production.

RIN's Final Rule

- **Need to register company and plant(s) with the EPA**
- **RIN's can be used to show compliance in the year generated and the subsequent year**
 - **Two-year life**
- **20% cap on use of prior year RIN's for compliance**
- **Equivalence Value**
 - **2.5* - Cellulosic & Waste Derived Ethanol**
 - **1.5 – Biodiesel (mono-alkyl ester)**
 - **1.7 – Non-ester renewable diesel**
 - **1.3 – Bio-butanol**
 - * **1.0 RINs must be transferred with each gallon and the remaining 1.5 RINs may be separated by the producer and sold**

RIN's Final Rule

- **Batch size 8 fields**
 - Allows for batches/shipments of up to 99 million gallons
 - EPA to allow renewable fuel producers to define batch size
 - Maximum size 1 calendar month of shipments from a plant
 - **RIN fungibility**
 - RIN does not have to be tied to a specific gallon
 - Only obligated parties & oxygenate blenders can separate RIN's from the gallons
- *Except cellulosic & waste derived ethanol producer**

What do we need?

- We need to comply with RFS requirements
- RIN Creation
- RIN Assignment
- RIN Correction
- RIN Expiration
- Purchased ethanol
 - With RINs
 - Without RINs
- RIN Reconciliation
- Reports

RIN Format

- RIN structure is a 38-character numeric code in the following format:

KYYYYCCCCFFFFFFBBBBBRRDSSSSSSSSSEEEEEEEEE

K	= RIN Type Flag (1-assigned; 2-separated)
YYYY	= Year of Batch Production (when it leaves the facility)
CCCC	= Company registration ID
FFFFFF	= Facility registration ID
BBBBB	= Serial Batch Number (assigned by the producer/importer)
RR	= Equivalence Value for the renewable fuel
D	= Renewable Energy Type (1-cellulosic; 2-non-cellulosic)
SSSSSSSS	= RIN Block Starting Gallon Number
EEEEEEEE	= RIN Block Ending Gallon Number

Example of a Non-Cellulosic RIN Creation

Sixteenth batch of non-cellulosic ethanol produced in 2007 of 198,450 net (60 °F) gallons:

KYYYYCCCCFFFFFFBBBBBRRDSSSSSSSSSEEEEEEEEE
12007999900001000161020000000100198540

K **1** = RIN Type Flag (1-assigned; 2-separated)
YYYY **2007** = Year of Batch Production (when it leaves the facility)
CCCC **9999** = Company registration ID
FFFFF **00001** = Facility registration ID
BBBBB **00016** = Serial Batch Number (assigned by the producer/importer)
RR **10** = Equivalence Value for the renewable fuel
D **2** = Renewable Energy Type (1-cellulosic; 2-non-cellulosic)
SSSSSSSS **00000001** = RIN Block Starting Gallon Number
EEEEEEEE **00198540** = RIN Block Ending Gallon Number



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Example of a Cellulosic RIN Creation

Sixteenth batch of cellulosic ethanol produced in 2007 of 198,450 net (60 °F) gallons: (496,125 RINs)

KYYYYCCCCFFFFFFBBBBBRRDSSSSSSSSSEEEEEEEEE
12007999900001000162510000000100198540

K **1** = RIN Type Flag (1-assigned; 2-separated)
YYYY **2007** = Year of Batch Production (when it leaves the facility)
CCCC **9999** = Company registration ID
FFFFF **00001** = Facility registration ID
BBBBB **00016** = Serial Batch Number (assigned by the producer/importer)
RR **25** = Equivalence Value for the renewable fuel
D **1** = Renewable Energy Type (1-cellulosic; 2-non-cellulosic)
SSSSSSSS **00000001** = RIN Block Starting Gallon Number
EEEEEEEE **00198540** = RIN Block Ending Gallon Number



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Example of a Cellulosic RIN Creation

Sixteenth batch of cellulosic ethanol produced in 2007 of 198,450 net (60 °F) gallons: (496,125 RINs)

KYYYYCCCCFFFFFFBBBBBRRDSSSSSSSSSEEEEEEEEE
22007999900001000162510019854100496125

K **2** = RIN Type Flag (1-assigned; 2-separated)
YYYY **2007** = Year of Batch Production (when it leaves the facility)
CCCC **9999** = Company registration ID
FFFFF **00001** = Facility registration ID
BBBBB **00016** = Serial Batch Number (assigned by the producer/importer)
RR **25** = Equivalence Value for the renewable fuel
D **1** = Renewable Energy Type (1-cellulosic; 2-non-cellulosic)
SSSSSSSS **00198541** = RIN Block Starting Gallon Number
EEEEEEEE **00496125** = RIN Block Ending Gallon Number



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Comparison of the Three Examples

Sixteenth batch of non-cellulosic ethanol produced in 2007 of
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Thank You

Jim Redding
Aventine Renewable Energy, Inc
Phone 309-347-9310
E-Mail jim.redding@aventinerei.com



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David Weibring



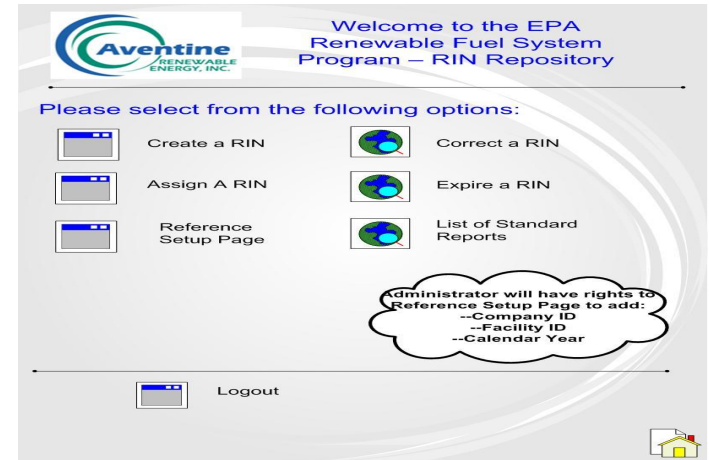
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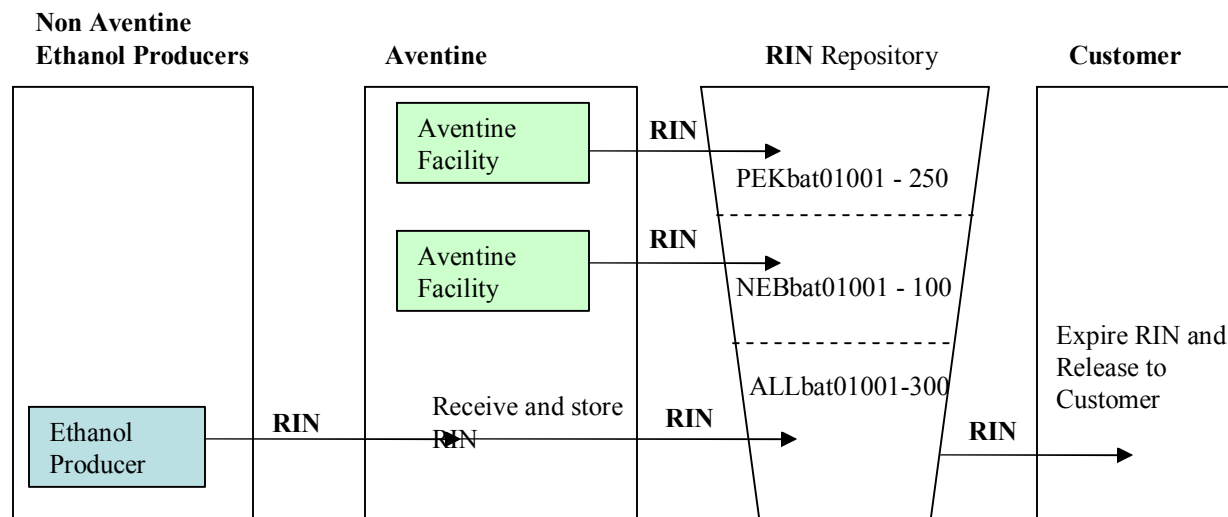
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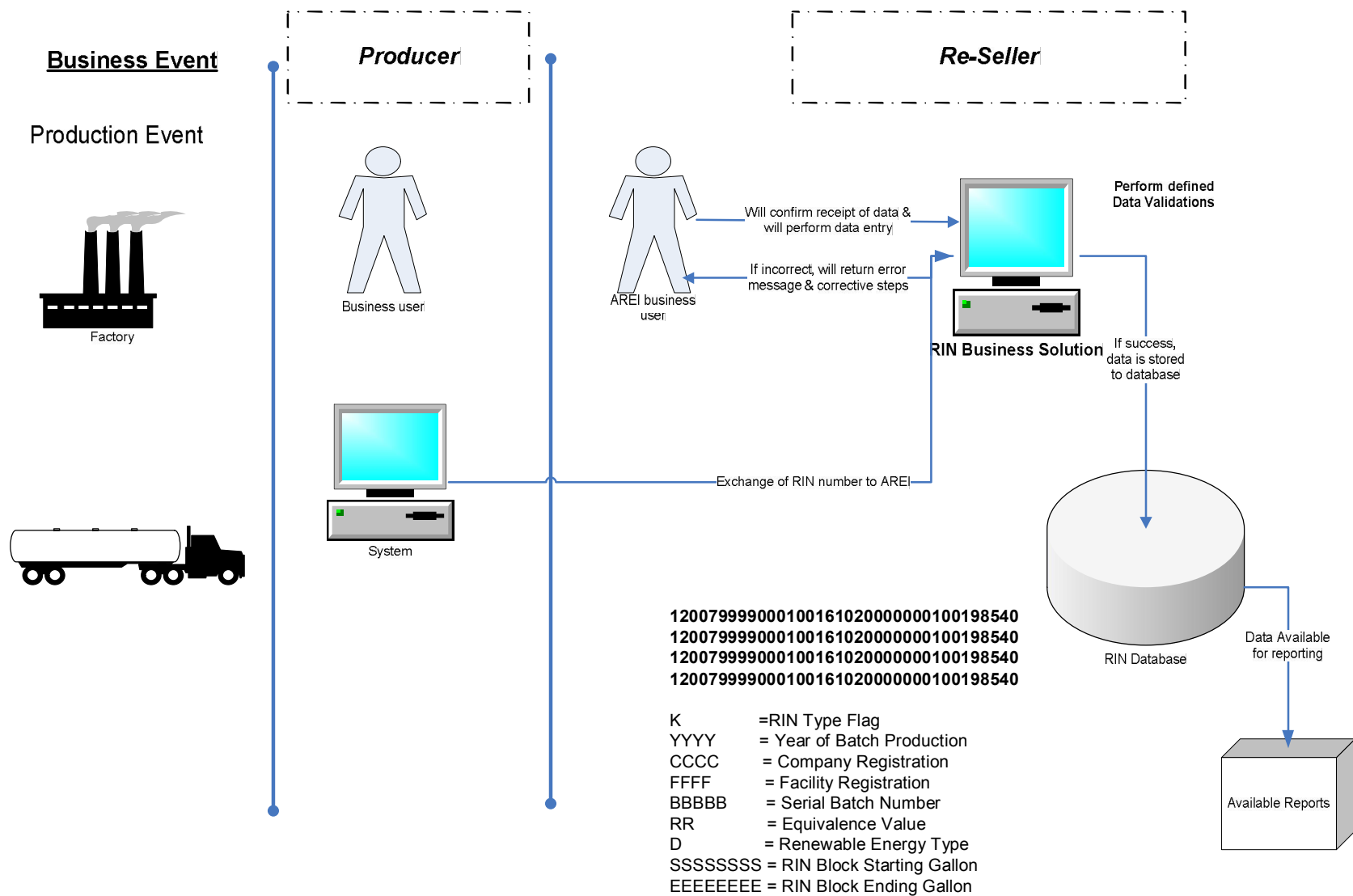
High Level Requirements

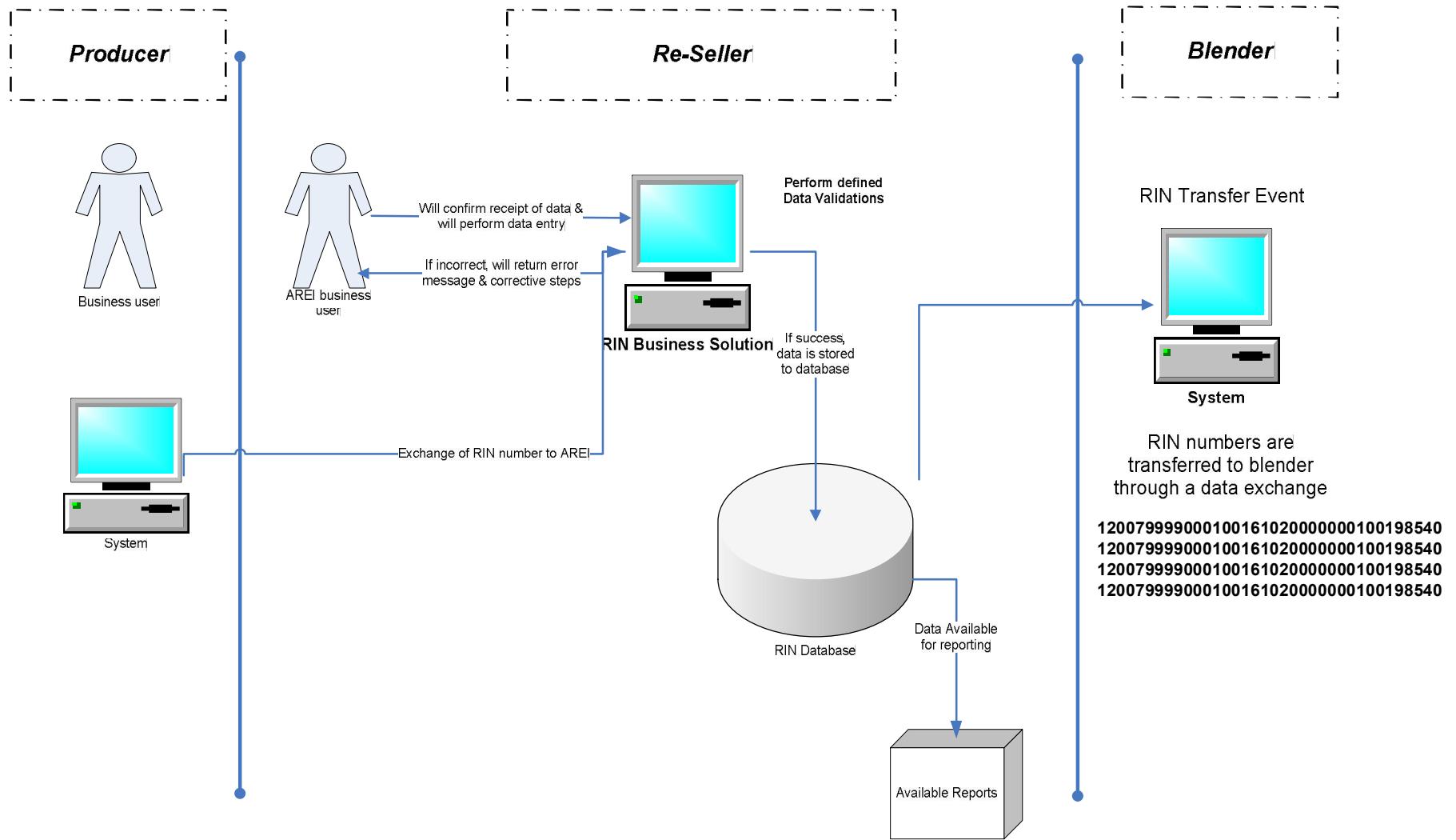
❖ Key Business Events

- RIN Creation / Expiration
 - ✓ Bill of Lading / Invoicing Event
- RIN Assignment
 - ✓ Manual
 - ✓ File Upload
- RIN Correction
 - ✓ EPA RFS fields vs. User Defined fields
- RIN Expiration
 - ✓ Manual Event
 - ✓ Programmatic Event – Date/Time
- Standard Reports
 - ✓ Based on above categories

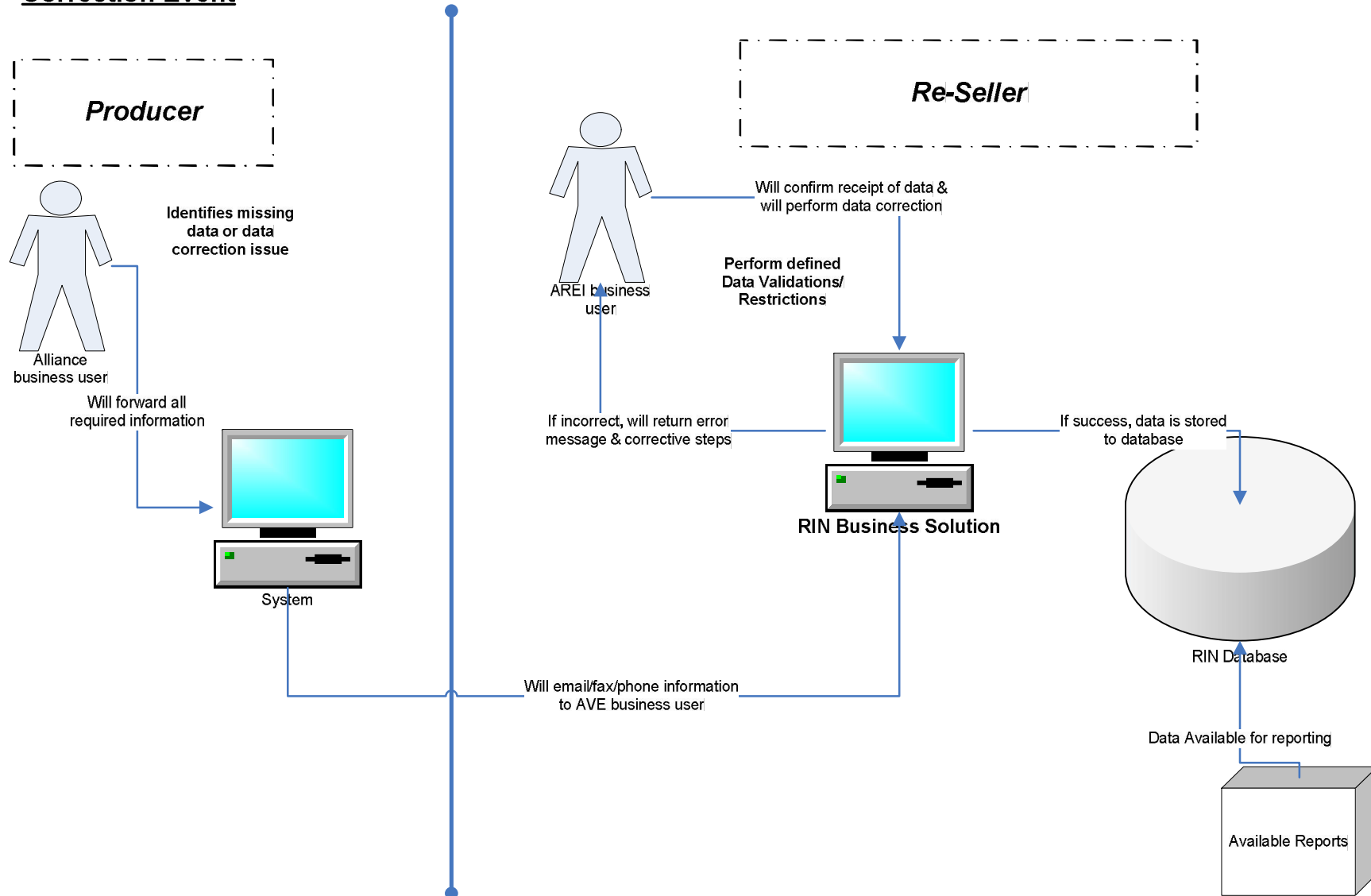




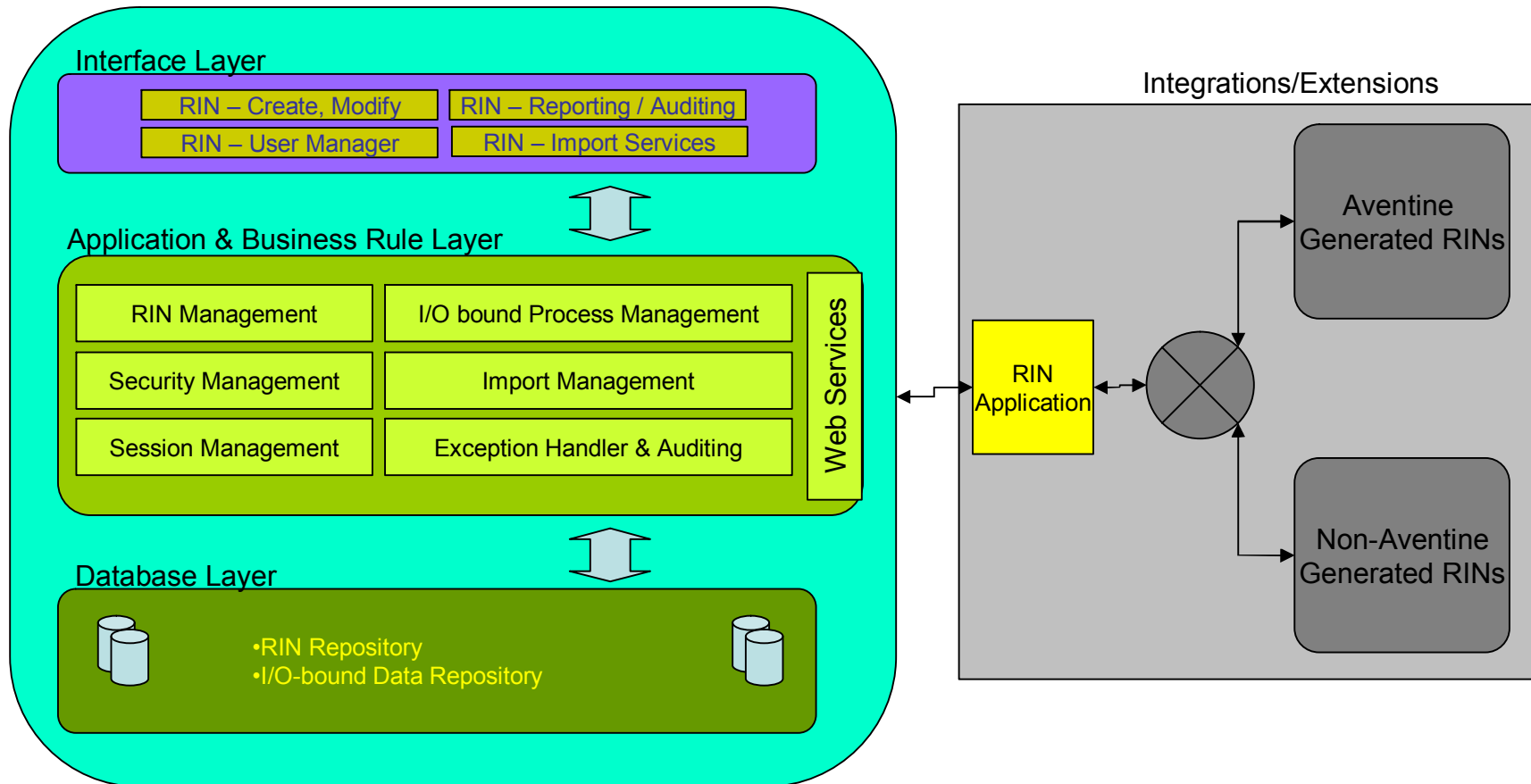




Correction Event



RIN Application Architecture



Thank You

David Weibring
Aventine Renewable Energy, Inc
Phone 309-347-9291
E-Mail david.weibring@aventinerei.com



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