

HVIP Low NOx + RF Requirement Overview

- » For Low NOx Engine Incentives administered through HVIP, a contract for renewable fuel (RF) is required.
- » The RF contract must cover 100% of planned fuel use for 3 years for the vehicles vouchers are requested for.
- » Under the RF requirement, customers may use contracted RF fuel with other fleet vehicles and still be in compliance.
- » Currently, only compressed natural gas vehicles receive Low NOx incentives, so the only applicable RF is Renewable Natural Gas (RNG).¹
- » RNG is natural gas derived from the decomposition of organic matter, e.g. dairy manure, landfills, wastewater.
- » Like fossil natural gas, RNG may be injected into the pipeline and sent to any pipeline-connected CNG or LNG station.
- » In most cases, RNG is available from major suppliers, and contracts are simple to put in place and cost no more than existing NG fuel.

1 RF requirement does not apply to the 11.9 liter engine for fleets with 3 or fewer trucks. See [HVIP Implementation Manual](#) (April 4, 2017) and [Draft Funding Plan](#) (September 26, 2017)

More Information:

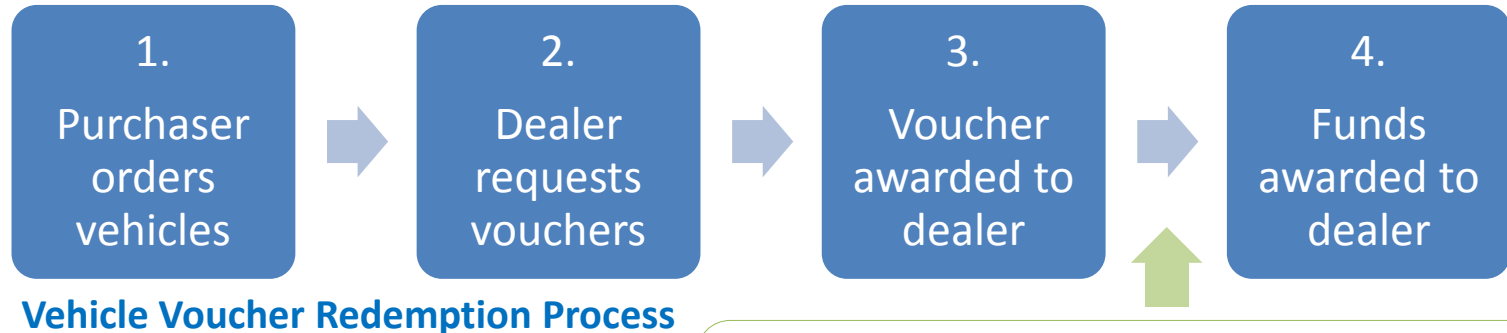
Ryan Schuchard, CALSTART at 626-744-5606 or rschuchard@calstart.org

Working Document – Jan 2, 2018

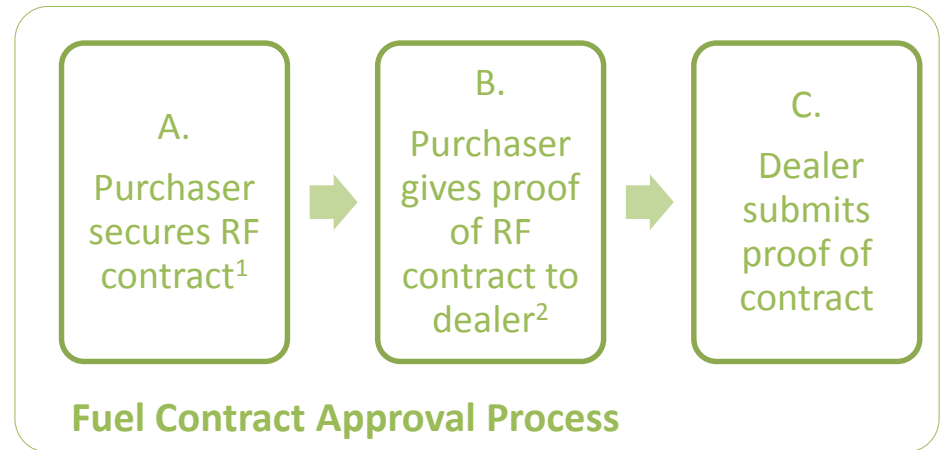
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HVIP Low NOx + RF Requirement

Illustrative Voucher Redemption Process



- » Dealer may submit proof of purchaser's RF contract at any time prior to awarding of funds



1 A list of participant providers is available

2 Proof of contract includes (1) copy of contract and (2) note with estimated fuel use

More Information:

HVIP Low NOx + RF Requirement

RNG Participant Providers

Organization	Name	Email	Phone
ampCNG	Chad Schlaepfer	cschlaepfer@ampcng.com	(303) 842-9724
Clean Energy*	Brandon Price	brandon.price@cleanenergyfuels.com	(949) 437-1261
Element Markets	Sydney Akuto	sakuto@elementmarkets.com	(516) 455-0606
Shell Energy	Tom Moffet	thomas.moffett@shell.com	(858) 526-2187
Trillium*	Allen Nielsen	allen.nielsen@loves.com	(801) 231-9684
	David George	DLGeorge@trilliumcng.com	(405) 302-6500
TruStar	Rob Strange	rstrange@trustarenergy.com	(909) 217-0990

* Operate public RNG station networks.

- » Participant Providers have been briefed on the RF requirement and have agreed that they can (a) provide contracts to fully fuel one or more vehicles' expected demand for three years via a volumetric commitment to 100% RNG, and (b) commence delivery of RNG within 60 days.
- » All providers can supply RNG to fleets' behind-the-gate filling stations and/or fleet-dedicated RNG in other CNG filling stations.
- » The above list is a working list that may grow over time. RNG providers who wish to become Participant Providers are invited to contact CALSTART.

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Roles and Responsibilities

Customers (Fleets)

- Establish contract with RF provider¹
- Submit memo noting commitment to use RF²
- Share contract and memo with dealer
- Affirm continuation of contract in yearly questionnaire

¹ Sensitive terms may be redacted

² Templates available – see slides

Vehicle Dealers

- Provide fleet customers information about RF requirements
- Submit customers' contract and memo when processing voucher request

³ In order for fuel providers to be listed as participant providers, they must be willing to offer these services in principle

RF Providers³

- Know RF program requirements and be willing to help fleets meet them
- Establish a contract with fleets to fuel 100% of demand for one or more vehicles for 3 years
- Commence delivery within 60 days

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Features for Ease and Simplicity

- » Required documentation is simply a copy of the contract and a memo outlining projected renewable fuel use with name of fuel provider
- » Ongoing validation is done via existing annual questionnaire—no additional steps are needed
- » Customers may use contracted RF fuel with any vehicles in fleet
- » RF providers have up to one year to make up deficits between RF “ordered” and RF delivered in case of supply interruptions

¹ Customer grants permission to RNG provider to validate RNG volumes contracted and delivered to HVIP administrator upon request; RNG provider agrees to provide the necessary information.

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Sample Memo Text

Option #1: Simple Agreement

January 2, 2018

HVIP Administrator,

HVIP requires that vehicles purchased with Low NOx vouchers use 100% renewable fuel for three years. Pursuant to this requirement, COMPANY is purchasing NUMBER low NOx VEHICLE/ENGINE TYPE with incentive funding from Low NOx vouchers and commits to using no less than the amount of renewable natural gas (RNG) required to operate all NUMBER of the vehicles with 100% renewable natural gas for no less than three years.

Specifically, we agree to fuel our fleet with at least NUMBER diesel gallons equivalent (DGE) through DATE, which will cover the projected fuel use of all NUMBER vehicles that we are purchasing with Low NOx vouchers (see Appendix below for details).

COMPANY has a contract in place for RNG delivery through DATE with PROVIDER NAME. The agreement number for the contract is RECORD IDENTIFIER and the contact person is NAME, PHONE, AND EMAIL. We grant the provider permission to validate our contracted and delivered RNG volumes upon your request, and they have agreed to provide the necessary information.

As a contingency measure for unexpected shortfalls or gaps in RNG delivery, if our fuel provider is unable to supply the complete amount of RNG required to operate all NUMBER vehicles for three years, we will make up the remaining amount through additional deliveries to be used within our fleet as soon as possible, and the total volume of RNG will be fully delivered by the end of year three.

Should COMPANY purchase additional Low NOx vehicles covered under the 100% RNG requirement, we will provide an updated memo that outlines our compliance with the requirement.

Signed,

Name
Address
City, CA, Zip Code
Phone

Appendix: Estimated Fuel Required:

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A. Vehicle type	B. Expected annual RNG fuel per vehicle (DGE)	C. Quantity of vehicles/ vouchers	D. Expected annual RNG fuel use subtotal (DGE) (column B x C)	E. Expected annual RNG fuel use over three years (DGE) (column D x 3)
Xpeditor E3	10,000	2	20,000	60,000
Autocar 4x2	12,000	3	36,000	108,000
Total RNG to be supplied and used over 3 years (DGE)				168,000

Sample Memo Text

Option #2: Two-Phase Agreement¹

January 2, 2018

HVIP Administrator,

HVIP requires that vehicles purchased with Low NOx vouchers use 100% renewable fuel for three years. Pursuant to this requirement, COMPANY is purchasing NUMBER of low NOx refuse haulers with incentive funding from Low NOx vouchers and commits to using no less than the amount of renewable natural gas (RNG) required to operate all NUMBER of the vehicles with 100% renewable natural gas for no less than three years.

Specifically, we agree to fuel our fleet with at least NUMBER diesel of gallons equivalent (DGE) through DATE, which will cover the projected fuel use of all NUMBER vehicles that we are purchasing with Low NOx vouchers (see Appendix below for details) and an additional NUMBER vehicles that are not required to use RNG. Our commitment will be met as follows:

Period of DATE – DATE – Current Contract

Currently, COMPANY has a contract in place for RNG delivery through DATE. We expect to use over NUMBER DGE of compressed natural gas (CNG) in 2017, with more than PERCENTAGE from RNG. While our contract does not specify a RNG content requirement, we expect the share of RNG to be at least PERCENTAGE since over PERCENTAGE of CNG delivered since DATE was from RNG, and our current provider has stipulated that the share is expected to remain stable.

Our current RNG provider is PROVIDER NAME. The agreement number for the contract is RECORD IDENTIFIER and the contact person is NAME, PHONE, AND EMAIL. We grant the provider permission to validate our contracted and delivered RNG volumes upon your request, and they have agreed to provide the necessary information.

Period of DATE – DATE – Subsequent Contract

Immediately following the end of our current contract in DATE, we expect to commence a new contract that will cover a similar level (or more) of RNG and which will cover our RNG commitment through the remainder of the 3-year period required (DATE). We will provide an update on the terms of the contract once the contract is finalized.

As a contingency measure for unexpected shortfalls or gaps in RNG delivery, for all periods above, if our fuel provider is unable to supply the complete amount of RNG required to operate all NUMBER vehicles for three years, we will make up the remaining amount through additional deliveries to be used within our fleet as soon as possible, and the total volume of RNG will be fully delivered by the end of year three.

Should COMPANY purchase additional Low NOx vehicles covered under the 100% RNG requirement, we will provide an updated memo that outlines our compliance with the requirement.

Name
Address
City, CA, Zip Code
Phone

Appendix: Estimated Fuel Required:

A. Vehicle type	B. Expected annual RNG fuel per vehicle (DGE)	C. Quantity of vehicles/ vouchers	D. Expected annual RNG fuel use subtotal (DGE) (column B x C)	E. Expected annual RNG fuel use over three years (DGE) (column D x 3)
Xpeditor E3	10,000	2	20,000	60,000
Autocar 4x2	12,000	3	36,000	108,000
Total RNG to be supplied and used over 3 years (DGE)				168,000

¹ This “two-phase agreement” could be used in a case where the customer has an existing RNG agreement in place that will serve part of the RF commitment, but the customer will need an additional contract to meet requirements for the full 3 years

Appendix

HVIP Low NOx + RF Requirement

Formal Requirement Language¹

- » For Low NOx Engine Incentives funded by GGRF through HVIP, a renewable fuel contract, and other additional information requested by CARB, will be required before a voucher is paid.
- » The renewable fuel contract must be for 3 years or more and require the use of 100 percent renewable fuel for new vehicles equipped with low NOx engines or existing vehicles repowered with low NOx engines.
- » The 3 year renewable fuel contract must cover the vehicle for 3 years once the vehicle is placed into service or the repowered vehicle is placed back into service.
- » The fuel contract will be reviewed by the HVIP and Low NOx Engine Incentives Grantee to verify that the above information is included in the contract.
- » Yearly questionnaires are sent to HVIP and Low NOx Engine Incentives participants.
- » Continued usage of renewable fuel will be monitored via the annual questionnaire for a three year period.

¹ [HVIP Implementation Manual](#) (April 4, 2017): Vehicle Technology Eligibility — New and Repowered Vehicles Using Low NOx Engines (p. 15)