

Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

## **Example Alternative Compliance Annual Report**

December 2019



NOTE: This example cover letter and annual report are intended primarily for an Alternative Compliance (AC) fleet that does **not** use DOE's electronic reporting spreadsheet to prepare its AC annual report. (DOE developed the electronic spreadsheet template to facilitate fleets' preparation of a complete annual report, and all fleets that participate in AC are encouraged to use the spreadsheet.) Fleets that use the reporting spreadsheet template may still wish to use the example cover letter below.

December 15, 2018

Regulatory Manager Alternative Fuel Transportation Program Vehicle Technologies Office (EE-3V) U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, DC 20585-0121

Re: MY 2018 Alternative Compliance Annual Report

## Dear Sir/Madam:

In accordance with 10 C.F.R. section 490.807, Power On, Inc. (POI; EPAct Fleet ID No. 999000) submits this letter and the accompanying report [Alternative Compliance reporting spreadsheet] certifying the amount of petroleum fuel use that it reduced during the 2018 waiver year (i.e., model year (MY) 2018) through Alternative Compliance.

Based on the Alternative Compliance waiver that the U.S. Department of Energy (DOE) granted to POI for MY 2018, the fleet's petroleum fuel use reduction requirement for MY 2018 was 47,400 gasoline gallon equivalents (GGE). The Petroleum Reduction Plan contained in POI's waiver application specified the use of two strategies to achieve an estimated reduction of 58,756 GGE.

The table below summarizes POI's planned petroleum fuel use reductions and the actual petroleum fuel use reductions that POI achieved, which are documented in the attached report [reporting spreadsheet].

| Strategy (fuel)        | Planned Petroleum Fuel Use<br>Reductions (in GGE) | Actual Petroleum Fuel Use<br>Reductions (in GGE) |
|------------------------|---|--|
| Alternative Fuel (CNG) | 14,162  | 24,196   |
| Biodiesel Blend (B100) | 44,594  | 81,766   |
| Total                  | 58,756  | 105,962  |

Given the 105,962 GGE savings the fleet actually achieved and the 47,400 GGE savings the fleet was required to achieve, the fleet managed to achieve an excess petroleum fuel use reduction of 58,562 GGE (i.e., 105,962 – 47,400) during MY 2018. POI's actual MY 2018 petroleum reduction amounted to 224 percent of its petroleum fuel use reduction requirement.

Pursuant to 10 C.F.R. section 490.804(c), POI hereby requests that DOE roll over the excess petroleum fuel use reductions that POI achieved in MY 2018 (i.e., 58,562 GGE) for potential use by our fleet in future model years in which POI participates in Alternative Compliance. POI understands that there are restrictions on the use of these roll-over GGEs, and that the restrictions are explained in DOE's *Alternative Compliance Guidance document(epact.energy.gov/pdfs/alt\_compliance\_guide.pdf)* 

Pursuant to 10 C.F.R. section 490.807(a)(1)(i), POI further certifies that its covered (i.e., nonexcluded) light-duty vehicles used a total of 127,787 GGE (i.e., petroleum gallons plus alternative fuel GGE) during MY 2018.

Included in the attached report [reporting spreadsheet] are the following:

- Details of the results obtained through each of the two strategies that POI employed;
- Discussion of the data used to calculate the strategy-specific petroleum fuel use reductions along with substantiating documentation [Note: For fleets that report via the reporting spreadsheet, attach the substantiating documentation and a copy of the petroleum reduction plan to your cover letter]; and
- A copy of the Petroleum Reduction Plan that POI submitted on July 15, 2018, as part of its Alternative Compliance waiver application is also attached.

Sincerely,

Al Ternafule
Director, Fleet Services
Power On, Inc.
999-777-1111
Al.Ternafule@Poweron.com

## Alternative Compliance – Model Year (MY) 2018 Petroleum Fuel Use Reduction Results

For MY 2018, Power On, Inc. (POI) employed two strategies to reduce the total amount of petroleum fuel used by the fleet. The first strategy was the continued use of compressed natural gas (CNG) as a motor fuel for natural gas vehicles (NGVs) in our fleet. The second strategy was the use of B20 (i.e., a biodiesel blend composed of 80% petroleum diesel and 20% neat biodiesel) in our diesel-powered medium- and heavy-duty motor vehicles.

POI's petroleum fuel use reduction requirement was 47,400 GGE.

## **Strategy 1: Use of Alternative Fuel (CNG)**

During MY 2018 (i.e., September 1, 2017–August 31, 2018), POI used in its utility operations 12 compact sedans and 28 large vans powered by CNG. The average annual vehicle miles traveled (VMT) for these vehicles is 8,914 miles for the large vans and 5,866 miles for the compact sedans, based on data derived from our fleet management information system. In addition, the fuel economy of these bi-fuel vehicles when operating on gasoline is 21.6 mpg (large vans) and 27 mpg (compact sedans). Hence, the petroleum fuel use reduction target for each vehicle class was 11,555 GGE for the large vans and 2,607 GGE for the compact sedans, for a total planned petroleum reduction target of 14,162 GGE, as reflected in the Petroleum Reduction Plan contained in our waiver application.

As indicated by the attached pumping records, during MY 2018, the amount of CNG @ 3,000 pounds per square inch (psi) dispensed into these 40 NGVs from POI's CNG fueling stations totaled 101,240 gallons. Consistent with DOE's Alternative Compliance Annual Reporting guidance and the CNG gallons @ 3000 psi conversion factor found in Appendix D of the *Alternative Compliance Guidance*, this yields the following calculation:

101,240 gallons of CNG @ 3000 psi x 0.239 GGE/gallon = 24,196 GGE

The total petroleum fuel use reduction achieved through the use of CNG as a motor fuel therefore exceeded the target amount by 10,034 GGE (i.e., 24,196-14,162). The greater-than-planned use of CNG was due to a delay in releasing several of the NGVs for sale/auction (i.e., greater-than-planned usage of the vehicles).

Strategy 2: Use of Biodiesel BlendsDuring MY 2018, POI planned to use B20 in its on-road diesel vehicles as an additional means by which to reduce the fleet's petroleum consumption. Our target was to reduce petroleum use by 44,594 GGE through the planned deployment of 209,165 gallons of B20, which equates to 41,833 gallons of neat biodiesel (B100) and, after application of the 1.066 conversion factor, 44,594 GGE. This biodiesel blend was to be used in our medium- and heavy-duty motor vehicle fleet, which consists of 9 motor vehicles weighing less than 14,000 pounds, 49 motor vehicles weighing between 14,000 and 26,000 pounds, and 206 motor vehicles weighing over 26,000 pounds. Based on data from our fleet management information system, these vehicles were expected to have average annual VMT figures of 32,659 miles, 23,777 miles, and 4,548 miles, respectively.

During MY 2018, and specifically from September 1, 2017 through July 1, 2018, POI purchased 383,520 gallons of B20 from its biodiesel supplier (bills of lading and purchase invoices verifying these purchases are on file). All of this B20 fuel was pumped first into the 10 diesel fuel tanks within POI's fueling system, and thereafter into the 264 diesel-powered medium- and heavy-duty motor vehicles in the POI fleet; none of this B20 was used in diesel-powered generators or non-road vehicles. Pumping records for the 10 diesel fuel tanks covering the period September 1, 2017 through August 31, 2018, and substantiating the dispensation of 383,520 gallons of B20 into the 264 medium- and heavy-duty motor vehicles, are attached. Consistent with DOE's Alternative Compliance Annual Reporting guidance and the B100 conversion factor found in Appendix D of the *Alternative Compliance Guidance*, the use of 383,520 gallons of B20 yields the following calculation:

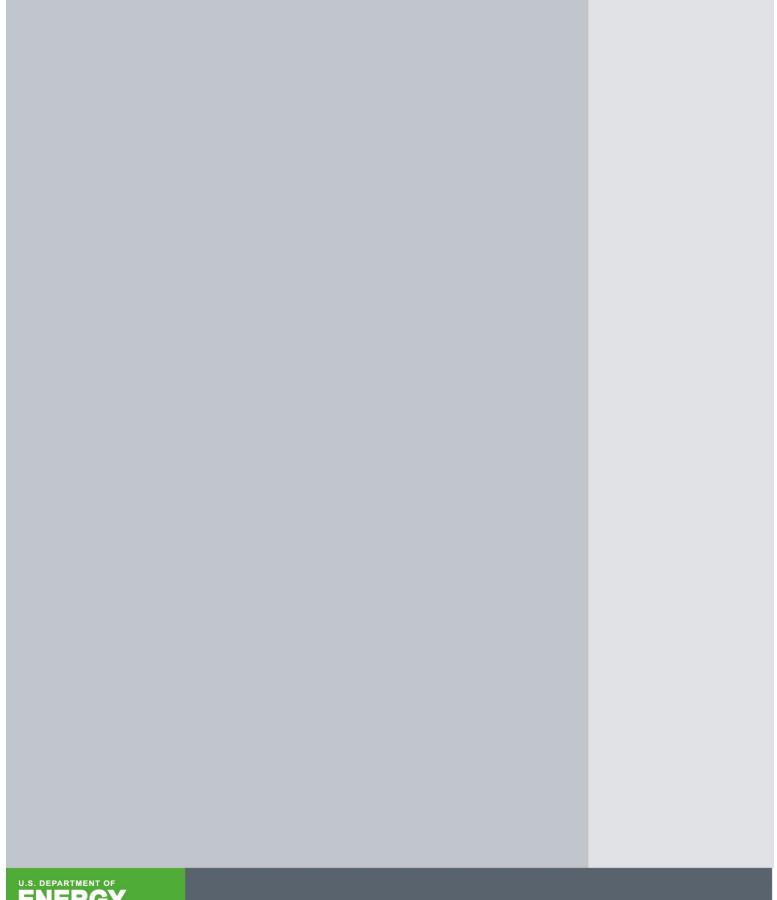
383,520 gallons of B20  $\div$  5 = 76,704 gallons of B100 76,704 gallons of B100 x 1.066 GGE/gallon B100 = 81,766 GGE

The total petroleum fuel use reduction achieved through the use of B20 therefore exceeded the target amount by 37,172 GGE (i.e., 81,766 – 44,594). Summary of Results During MY 2018, POI used two strategies to meet its petroleum fuel use reduction requirement of 47,400 GGE. POI's first strategy involved using CNG to power 40 NGVs in its fleet. The actual result, which exceeded the target set forth in the Petroleum Reduction Plan, amounted to a reduction in petroleum consumption of 24,196 GGE.POI's second strategy entailed the use of a biodiesel blend in the fleet's diesel-powered medium- and heavy-duty motor vehicles. POI's actual use of biodiesel in these vehicles during MY 2013 was 383,520 gallons of B20, which equates to 81,766 GGE of B100, an increase over the planned amount. In total, POI was required to reduce its petroleum consumption during MY 2018 by 47,400 GGE. POI achieved an actual petroleum fuel use reduction of 105,962 GGE, or 221% of the required amount.

| Strategy               | Calculated Petroleum Reduction Requirement | Planned Petroleum<br>Fuel Use Reductions<br>(in GGE) | Actual Petroleum Fuel<br>Use Reductions (in<br>GGE) |
|------------------------|--|--|---|
| Alternative Fuel (CNG) |  | 14,162   | 24,196  |
| Biodiesel Blend        |  | 44,594   | 81,766  |
| Total                  | 47,400                                     | 58,756   | 105,962   |

\*\*The following plan and values in the plan are provided ONLY as an example and likely do not resemble typical fleet use figures. The information below may not match the information in the preceding portion of this example report.\*\*

| Enter data in cells with<br>Select a value from the<br>Calculated values. Do<br>Error or unchecked req  | e dropdown list<br>not enter data in cells shaded in this color  |  | Point of Contact Inf<br>POCID Number:<br>*Name:<br>Mailing Address (if diff |   | siling address)   | POC Name                        |
|---|--|--|---|---|---|---------------------------------|
| Parent Organization:  *Fliest Type (select from list):  *Mailing Address:  *City:  *State:  *Zip (boooce-boood):  (Parent Organization is parent company name | P P a street a city CO 80401 , if applicable, for alternative fuel provider fleet                                      |  | City:<br>State:<br>Zip (xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx                |   |   | 303 555-5555<br>a_POC@irrai.gov |
| Enter the Reporting Model Year Enter you ACV Inventory Total Enter the average fuel use per light-duty  | 100 LDVs   | 9/1/17  ACV Inventory  Avg Fuel Use            | 7 to  | 8/31  | 1/18  |                                 |
| vehicle (LDV) in your fleet MY 2018 Petroleum Reduction Requirement   | 474] GGE/LDV 47,400] GGE   | <ul><li>Calculation</li><li>Changing</li></ul> |   |   |   |                                 |
|   | method below to calculate the planned GGE red<br>Planning Summany" button to return to this she<br>Biodiesel<br>Blends |  | Truck Stop  | for each category w<br>Idle Time<br>Reduction | Onboard IR  |                                 |
| Method<br>Alternative Fuels   | Planned Petroleum Reduction 14,162   | 70,000   |   |   |   |                                 |
| PHEVS Biodiesel Blends Fuel Economy VMT Reduction Truck Stop Electrification Idle Time Reduction Onboard IR   | -<br>44,594<br>-<br>-<br>-   | -  |   | Petroleum                                     | Onboard IR  Idle Time Reduction  Truck Stop Electrification |                                 |
|   |  | 50,000   |   |   | VMT Reduction  Fuel Economy  Biodiesel Blends  PHEVs        |                                 |
|   |  | 20,000   |   | <b>-</b>                                      | PHEVS  Alternative Fuels  Petroleum Reduction Requirement   |                                 |
|   |  |  |   |   |   |                                 |





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