

September 25th, 2019

Mrs. S. Bertilia Leblanc-McKenzie General Manager DOMLEC 18 Castle Street, Roseau **DOMINICA**

Dear Mrs. LeBlanc-McKenzie,

Re: Reporting of DOMLEC's Monthly Fuel Usage from its Thermal Plants

This letter brings to conclusion the discussions between DOMLEC and the IRC on the above-captioned and also supersedes any and all previous correspondence on this matter. Furthermore, it confirms the agreed approach to be utilized by DOMLEC for the determination of fuel consumed by the thermal plants at Sugarloaf and Fond Colé. Specifically, this has particular application when there are faulty meters on DOMLEC's fuel supply distribution system.

These *new rules* for the reporting of DOMLEC's monthly fuel usage from its thermal plants will be effective from October 1st, 2019 and applied to the October billing.

Consequent to the last meeting held post your receipt of our letter of August 19th, 2019, DOMLEC communicated via a letter sent to the Commission on September 2nd, 2019, expressing their concerns as discussed. The Commission has given due consideration to these concerns and hereby submits its response.

Again, the Commission wishes to re-iterate that in the industry there are two standard acceptable forms of measurement:

- 1. Fuel meters, and
- 2. Dipstick.

These methods are complimentary and are utilized to provide a level of confidence in the accuracy of the quantities that are measured; the dip stick method being the most reliable of the two forms of measurement, while the fuel meter is the most accurate.

Under **no circumstances** will the Commission accept fuel consumption quantities utilizing any formula or algorithm.

Independent Regulatory Commission

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Thus, with immediate effect the IRC instructs the following:

- 1. When all of DOMLEC's fuel meters at Sugarloaf and Fond Colé are <u>functioning</u> <u>properly</u>, that is, at the agreed specifications, the following will apply in deriving therefrom the binary measurement system, that is, dip stick and fuel meters, the quantity to be utilized in the fuel surcharge calculations, and in order to remove all doubt as to DOMLEC's understanding or interpretation in practical application of the stated rule, it is further elaborated that:
 - a. Fuel meters at Sugarloaf and Fond Colé that are functioning properly, should be registered as the primary fuel meters that are directly connected to the generating units. In this situation, if the margin of error between these fuel meters and the dip stick is greater than 1%, then the lower of the two readings will be used for the fuel surcharge calculations; or
 - b. If per chance, at Sugarloaf, the fuel consumed must be taken from the secondary (summation) meter, and if the margin of error between these fuel meters and the dip stick is greater than 1%, then the lower of the two readings, will be used for the fuel surcharge calculations;
 - c. Additionally, if per chance at Fond Colé the consumption of quantities are derived from a combination of primary and secondary (summation) fuel meters, and if in this case, the margin of error between the fuel meter quantities and the dip stick is greater than 1%, the lower of the two readings will be used for the fuel surcharge calculations.

In all of the cases stated above, if the margin of error between the meter quantities and dip stick is less than or equal to 1%, then the fuel meter quantities as derived through combination (that is, a mixture of primary and secondary (summation) fuel meter quantities or otherwise), will be used for the fuel surcharge calculations.

- 2. In the circumstances where any of DOMLEC's fuel meters <u>are faulty</u> then the following will apply:
 - a. At Sugarloaf, if any primary fuel meter that feeds any of the generators at this power station fails, then on this homogeneous fuel distribution system the secondary summation meter reading will be taken as the fuel consumed by the generators. In the event that the secondary summation meter fails, then the dip stick measurement will be taken as the quantity for fuel consumed by these generators.

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- (i) If there is a faulty primary meter in **every segment** of the fuel distribution system, then the secondary summation meter readings will be taken as the fuel consumed by the generators. If all or any one of these summation meters fail, then the dip stick measurement will be taken as the reading for the fuel consumed by all the generators.
- (ii) If there are faulty meters within **Segment 1**, then the reading from the secondary summation meter associated with Segment 1 will be taken as the reading for fuel consumed by generators in that segment.

Segments 2 and 3 are assumed to be in good working order. The same procedure will be replicated if there are faulty meters within the other segments. In the event that the secondary summation meter for any of these segments fail, then the dip stick measurement will be taken as the reading for the fuel consumed by all the generators.

- (iii) If per chance, all of the primary fuel meters and secondary summation meters all together fail, then the dip stick measurement will be taken as the reading for the fuel consumed by all the generators.
- 3. When the dip stick measurement is utilized due to fuel meter failures at DOMLEC's thermal generating plant the following formula will be applied towards the determination of the fuel surcharge.

The formula is $Fuel Consumed = 0.99 \times Dip Stick Measurement$.

The quantity derived from this formula will be utilized in the calculation of the monthly fuel surcharge until all faulty meters are replaced and verified to be functioning accurately.

The penalty of 1% is apportioned accordingly:

- (i) One component is applied to bring the dip stick measurement in alignment with the fuel meter readings of 37%; and
- (ii) The other component of 63% is a penalty for encouraging DOMLEC to resolve the faulty meter issues in a timely manner.

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(ii) The other component of 63% is a penalty for encouraging DOMLEC to resolve the faulty meter issues in a timely manner.

Please note that these averages were derived using the variances of working summation meters and the dip stick. The Commission performed analysis to arrive at this quantity and thinks that it is fair and reasonable. It was calculated at 1%.

4. DOMLEC will report all quantities measured from all the working primary and secondary fuel meters, as well as the dip stick measurements, as is now practiced. All faulty meters should be clearly identified in your reporting.

Hence, the Commission recommends that as per best practice by utilities worldwide, that spare primary and secondary meters should be kept in DOMLEC's inventory for rapid replacement of failed meters; as well as the implementation of regular calibration of all fuel meters to ensure that the required accuracy levels of the quantities measured are maintained. As such, DOMLEC will be required to submit a calibration schedule for all the fuel meters at its thermal plant for the Commission, at the soonest and sustain doing so bi-annually (i.e. every six months).

Please be guided accordingly.

Sincerely,

INDEPENDENT REGULATORY COMMISSION

JUSTINN KASE

EXECUTIVE DIRECTOR

cc. Chairman and Commissioners (IRC)
Regulations Department (IRC)