

In the matter of the Public Utilities Commission Act 1990 (No. 26 of 1990)

- and -

In the matter of complaints regarding the adequacy, efficiency and safety of the service provided by the Guyana Electricity Corporation.

- PAHADATH J. MENON, A.A. - Chairman
- HUGH GEORGE - Member
- JOHN WILLEMS, A.A. - Member
- ERROL HANOMAN - Member
- A.M.B. SANKIES - Member

Representation

- The Guyana Electricity Corporation - Mr Rajendra Poonai, Attorney-at-Law
Mr Vic Puran, Attorney-at-Law
- The Guyana Consumers' Association - Ms L. Ferdinand, Attorney-at-Law and Andrew Pollard, Attorney-at-Law
- The Guyana Consumers' Advisory Bureau - Ms Eileen Cox
- Complainants - In person

D E C I S I O N

In the light of persistent blackouts and complaints of damage to equipment and machinery due to the erratic supply of electricity by the Guyana Electricity Corporation ("G.E.C") and the failure of the G.E.C to supply electricity to a substantial section of households as well as for manufacturing and industrial purposes, this Commission on 24th August, 1995, issued to the GEC a notice under section 56 of the Public Utilities Commission Act 1990 (No. 26 of 1990) ("PUC Act") intimating the intention of the Commission to initiate hearings for the purpose of determining whether the G.E.C has discharged, is discharging and has made arrangements for discharging, its obligations under subsection (1) of section 26 of the PUC Act. The hearings were in particular to relate to -

- (a) whether the G.E.C. is providing safe, adequate, efficient, and reasonable supply of electricity to consumers within the Areas of Supply;
- (b) whether the G.E.C. is making all such repairs, changes, alterations, substitutions, extensions and improvements in or to its service as shall be necessary or proper for the accommodation and convenience of the public or as shall be necessary to incorporate, from time to time, advances in technology;
- (c) the plans and programme which the G.E.C. has prepared to meet the increasing demand for electricity in the Areas of Supply during the next five years and the assessment by the G.E.C. of the likely demand for electricity in Guyana as a whole, and in the Areas of Supply in particular, at the end of the next five years;
- (d) arrangements made, or proposed to be made by the G.E.C., for financing the plans and programmes referred to in sub-paragraph (c) above;
- (e) whether the G.E.C. has complied with section 47 of the PUC Act in cases to which that section applies;

- (f) the cost of generation per unit of electricity in each of the generating stations of the G.E.C.;
- (g) the cost per unit incurred by the G.E.C. for distribution of electricity;
- (h) the terms and conditions of any offer for sale of electricity to the G.E.C. received by it during the past three years, including the price per unit of electricity.

2. Pursuant to the above mentioned notice public hearings were held by the Commission on 5th and 12th September, 1995, 24th October, 1995, and 22nd and 30th April, 1996.

3. The written clarifications and information furnished by the G.E.C. are hereby marked as Exhibits C-1, C-1(a), C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9, and C-10.

4. Under section 26(1) of the PUC Act the G.E.C. is required to maintain its property and equipment in such condition as to enable it to provide, and G.E.C. is further required to make every reasonable effort to provide, service to the public in all respects safe, adequate and efficient. Besides, under that section the G.E.C. is required to make all such repairs, changes, alterations, substitutions, extensions and improvements in or to such service as shall be necessary or proper for the accommodation and convenience of the public, or as shall be necessary to incorporate, from time to time, advances in technology.

5. Adequacy of Service -

After having carefully considered the arguments addressed by the legal counsel for the G.E.C. and the other concerned parties in regard to this matter, the Commission has come to the conclusion that the service provided by the G.E.C. can be said to be adequate only if the G.E.C. fulfills its obligation under section 16(3) of the Electricity Act, Cap. 56:01. The above Act, enacted in December 1960, established the G.E.C. and defined its powers and responsibilities. Under subsection (3) of section 16 of the Electricity Act, the G.E.C. is required to supply energy within the areas described in the First Schedule to that Act ("Areas of Supply") to any person requiring a supply of energy if such

consumer undertakes to enter into a contract with the G.E.C., giving such security as the G.E.C. may require, to take, or continue to receive, and to pay for a supply of energy upon such terms and conditions as the G.E.C. may determine. The First Schedule to the Electricity Act covers most of the populated areas of Guyana.

6. In our view the reference to supply of energy in section 16(3) of the Electricity Act means supply of such quantity of energy as is required by the consumer.

7. The persistent blackouts the people of Guyana have been experiencing for long periods now is a clear indication that the GEC has failed to fulfill its statutory obligation as to the adequacy of supply of electricity. The periods of blackouts presently extend in most cases to eight hours per day. In fact the inability of the G.E.C. to provide an adequate supply of electricity is conceded by it. In a statement submitted by the G.E.C. in October, 1995, in reply to the Notice issued to it, G.E.C. stated -

"The performance of the G.E.C. over a number of years has suffered from the lack of sufficient firm generating capacity and the lack of sufficient funds to carry out the maintenance required." (Exhibit C-10, page 3).

At page 7 of the above statement it is stated -

"At present the production of Electricity by the G.E.C. reasonably matches the demand.

However, interruptions of power supply to consumers still exist and are caused by a number of factors, among which are the following - "

The factors are then dealt with.

8. The statement that at present the production of Electricity by the G.E.C. reasonably matches the demand is not true as is evident from the persistent blackouts the people of this country have been experiencing. Besides, the Prime Minister himself is reported to have said that the demand by over 25,000 households for the supply of electricity has not been met by the G.E.C.

9. Again it is stated at page 16 of the above statement -

"There is a significant load (mainly industrial) not connected to the G.E.C.'s system. This load has been determined to be in the order of 15 M.W."

Obviously, it was necessary for these industrial undertakings to provide their own electricity because the G.E.C. failed to supply electricity to them or to provide a stable and dependable supply of electricity.

10. We have received numerous complaints about the non-provision of electricity by the G.E.C. A typical case relates to the request to supply 3 megawatts of electricity to the Guyana National Engineering Corporation Ltd. ("GNEC"), a Government owned company. According to the GNEC it installed two Induction Furnaces and other ancillary equipment in its Foundry in February 1995. The GNEC required 3 megawatts of electricity for the Foundry Operations. This has not been provided by the GEC till now though the GNEC was caused to install special power distribution facilities at a high cost for that purpose.

11. The Acting General Manager of the GEC admitted before the Commission that the required 3 megawatts of power was not supplied to the GNEC though he contended that no contract for the supply was entered into by the G.E.C. and the GNEC. The G.E.C. admittedly had the capacity to supply the required electricity only after 11 in the night and before 8 in the morning.

12. On a careful consideration of all the material before us we are fully satisfied that the G.E.C. is not providing an adequate supply of electricity in the Areas of Supply.

Efficiency of Service -

13. Exhibit C-2 was filed by the G.E.C. and gives particulars about the electricity generated by the G.E.C. and billed by it for the years 1992 to 1994 and for the period January to June 1995. The particulars, according to Exhibit C-2, are as follows for the period January to June, 1995 -

	<u>ELECTRICITY GENERATED</u>		<u>BILLED</u>
	MWH		MWH
January	27.438		14.073
February	24.340		15.304
March	27.635		14.703
April	27.087		17.795
May	28.303		18.205
June	27.284		18.504

The difference between the electricity generated and billed is composed of station electricity use and line and commercial losses. It is not clear what is meant by "commercial loss". Does it represent stolen electricity?

14. In Exhibit C-1(a) submitted by the G.E.C. it is stated that one of the reasons for line losses is stated to be "the old-generation high-loss design transformers". It may be pointed out in this connection that under section 26(1) of the PUC Act the G.E.C. is required to make all such repairs, changes, alterations, substitutions, extensions and improvements in or to such service as shall be necessary to incorporate, from time to time, advances in technology.

Efficiency of Service -

13. Exhibit C-2 was filed by the G.E.C. and gives particulars about the electricity generated by the G.E.C. and billed by it for the years 1992 to 1994 and for the period January to June 1995. The particulars, according to Exhibit C-2, are as follows for the period January to June, 1995 -

	<u>ELECTRICITY GENERATED</u>		<u>BILLED</u>
	MWH		MWH
January	27.438		14.073
February	24.340		15.304
March	27.635		14.703
April	27.087		17.795
May	28.303		18.205
June	27.284		18.504

The difference between the electricity generated and billed is composed of station electricity use and line and commercial losses. It is not clear what is meant by "commercial loss". Does it represent stolen electricity?

14. In Exhibit C-1(a) submitted by the G.E.C. it is stated that one of the reasons for line losses is stated to be "the old-generation high-loss design transformers". It may be pointed out in this connection that under section 26(1) of the PUC Act the G.E.C. is required to make all such repairs, changes, alterations, substitutions, extensions and improvements in or to such service as shall be necessary to incorporate, from time to time, advances in technology.

15. We have given in paragraph 13 figures relating to electricity generated and billed by the G.E.C. during the period January to June 1995 as given in Exhibit C-2 submitted by the G.E.C. But the figures given in regard to electricity generated and billed for the same period in Exhibit C-1(a), again filed by the G.E.C., are different. The figures given in Exhibit C-1(a) are as follows -

YEAR 1995

	<u>ELECTRICITY GENERATED</u>	<u>BILLED</u>
	KWH	KWH
January	27,438,000	18,511,499
February	24,340,000	17,156,423
March	27,635,000	16,063,145
April	27,089,000	17,845,734
May	28,303,000	17,765,146
June	27,284,000	18,730,721

16. The reason for the difference in the figures,, relating to the same period, in the two documents filed by the G.E.C. has not been explained. Whatever that may be, the level of transmission loss incurred by the G.E.C. is on the high side. One of the steps to be taken to improve the situation will be replacement of the "old generation high-loss" design transformers presently in use.

17. In addition to the transmission loss, there is loss resulting in the process of conversion of electricity from 50 cycles to 60 cycles and vice versa and according to Exhibit C-1(a) statement submitted by the G.E.C. the average monthly energy conversion loss is 254 MWH.

18. The evidence submitted before us leads us to conclude that the service provided by the G.E.C is not efficient.

19. Safety of Service

We have received a large number of complaints from persons in all walks of life, as regards damage to equipment and other losses due to power surges and unstable voltage. In the case of Mr Liburd, his home and all his belongings in it have been destroyed by fire which, according to him, was because of erratic supply of electricity by the G.E.C.

20. Having regard to all the circumstances and the evidence before us we are satisfied that very often the service provided by the G.E.C. is not safe.

21. In the past the G.E.C. has been protected from scrutiny. This may be one of the reasons for the failure of the G.E.C. to perform. For the purpose of the matters dealt with by this Order it is not necessary to apportion blame. However, one case may be mentioned. In 1991, the G.E.C. submitted to this Commission a request for approval for increasing the rates then being charged for electricity supplied by the G.E.C. to the consumers. However, before this Commission could study the matter steps were taken to exempt the G.E.C. from the jurisdiction of this Commission for regulating rates. Thereafter the rates for electricity supplied by the G.E.C. were increased several times.

22. In the saga of the G.E.C. if the award of a prize is to be made, it has to be for the great reserve of patience displayed by the people of Guyana. They have patiently borne the punishment imposed by the G.E.C. by way of persistent blackouts, and industrial backwardness on account of the failure of the G.E.C. to provide adequate power for industrial production.

23. The G.E.C. was established by the Electricity Act, Cap. 56:01, which was enacted on 28th December, 1960. Over 35 years have elapsed after that and we are of the view that the G.E.C. had enough time to fulfill, and to develop and strengthen itself to be in a position to fulfill, its statutory obligations under section 16 of that Act. However, the existing reality has to be taken note of and in this Order we propose to concentrate on remedial measures.

24. Order -

In the light of the above discussions, we are of the view that the G.E.C. is required to undertake repairs, changes, alterations, extensions, substitutions and improvements in the GEC's generation and distribution facilities to satisfy its statutory responsibilities under section 26(1) of the PUC Act, read with section 16 of the Electricity Act, Cap. 56:01. We are also of the view that it is necessary to direct the G.E.C. to incorporate in the service provided by it advances in technology which would result in the improvement in the service provided by the G.E.C. and in reducing its cost.

25. The measures indicated above would include increasing generation of electricity and improving its transmission and distribution.

26. For the above purposes, before we make a final order, we hereby direct the GEC to submit to us a short term and a long term plans. The short term plan should cover a period of three years and the long term plan should cover a period of seven years. We have specified a period of seven years for the long-term plan in view of the possibility that it may include hydro-power generation. The short term plan should be submitted within two months from the date of this Order and the long term plan within six months from the date of this Order. Both the plans should contain technical

details, the source of energy generation, time frame for completion of each phase of it and the cost and sources of finance, and should cover both generation and transmission and distribution.

27. The short term and long term plans submitted by the GEC will be examined by this Commission in consultation with relevant interest groups and the Commission reserves the right to modify the same if found necessary.

28. We would like to make clear that we are not talking about 10 or 20 megawatts of additional generation of electricity. In preparing the plans the GEC shall take into account the stated policy of the Government to move forward the country from one exporting raw materials to a country exporting manufactured goods and from a country of traders to a country of manufacturers.

29. We are aware of a proposal to identify a core investor and to privatise the G.E.C. But according to statements made by the Acting General Manager of the GEC at the public hearings of the Commission, this exercise seems likely to take nearly two years. We are of the view that this exercise could not provide any excuse for putting off the designing and implementation of the short-term and long-term plans referred to above.

30. In our view it is more than likely that persons would be willing to invest in the G.E.C. if they are assured of a minimum rate of return, a management team that instills confidence in the investors and reorganisation of the structure of the G.E.C. to provide fair representation for investors.

31. Award of Costs -

The Guyana Consumers' Association is awarded \$50,000.00 dollars as costs which will be paid to them by the G.E.C. within thirty days from the date of this Order.

Dated at Georgetown Guyana

this 23rd day of May, 1996.

Pamadath J. Menon

.....
PAMADATH J. MENON, A.A.

- Chairman

Hugh K. George

.....
HUGH GEORGE

- Member

John Willem S.

.....
JOHN WILLEMS A.A.

- Member

Errol Hanohan

.....
ERROL HANOHAN

- Member

A.M.B. Sankies

.....
A.M.B. SANKIES

- Member