

**COMMITTEE ON PUBLIC  
UNDERTAKINGS  
(1978-79)**

**(SIXTH LOK SABHA)**

**FIFTIETH REPORT**

**ON**

**BHARAT HEAVY ELECTRICALS LTD.**

**(Ministry of Industry)**



सत्यमेव जयते

*Presented in Lok Sabha and  
Laid in Rajya Sabha on April 27, 1979.*

**LOK SABHA SECRETARIAT  
NEW DELHI**

*April 1979/Vaisakha, 1901 (S)*

*Price: Rs. 2.64*

328.374A

LS

**LIST OF AUTHORISED AGENTS FOR THE SALE OF LOK SABHA  
SECRETARIAT PUBLICATIONS**

**ANDHRA PRADESH**

1. Andhra University General Co-operative Stores Ltd., Waltair (Visakhapatnam).

**BIHAR**

2. M/s. Crown Book Depot, Upper Bazar, Ranchi (Bihar).

**GUJARAT**

3. Vijay Stores, Station Road, Anand.

**MADHYA PRADESH**

4. Modern Book House, Shiv Volas Palace, Indore City.

**MAHARASHTRA**

5. M/s. Sunderdas Gianchand, 601, Girgaum Road, near Princess Street, Bombay-2.
6. The International Book House Pvt., 9, Ash Lane, Mahatma Gandhi Road, Bombay-1.
7. The International Book Service, Deccan Gymkhana, Poona-4.
8. The Current Book House, Maruti Lane, Raghunath Dadaji Street, Bombay-1.
9. M/s. Usha Book Depot, 585/A, Chira Bazar Khan House, Girgaum Road, Bombay-2.

10. M & J Services, Publishers, Representatives Accounts & Law Book Sellers, Bahri Road, Bombay-15.

11. Popular Book Depot, Dr. Bhadkamkar Road, Bombay-400001.

**MYSORE**

12. M/s. Peoples Book House, Opp. Jaganmohan Palace, Mysore-1.

**UTTAR PRADESH**

13. Law Book Company, Sardar Patel Marg, Allahabad-1.

14. Law Publishers, Sardar Patel Marg, P.B. No. 77, Allahabad—U.P.

**WEST BENGAL**

15. Granthaloka, 5/1, Ambica Mookherjee Road, Belgharia, 24-Parganas.
16. W. Newman & Company Ltd., 3, Old Court House Street, Calcutta.
17. Mrs. Manimala, Buys & Sells, 128, Bow Bazar Street, Calcutta-12.

**DELHI**

18. Jain Book Agency, Connaught Place, New Delhi.
19. M/s. Sat Narain & Sons, 3141, Mohd. Ali Bazar, Mori Gate, Delhi.

## CONTENTS

	PAGES
COMPOSITION OF THE COMMITTEE . . . . .	(iii)
COMPOSITION OF THE SUB-COMMITTEE ON BHARAT HEAVY ELECTRICALS . . . . .	(v)
INTRODUCTION . . . . .	(vii)
A. Historical background of setting up of Bharat Heavy Electricals Ltd. . . . .	1
B. Collaboration <del>Agreements</del> with Siemens/Kraftwerk Union of West . . . . .	2
C. Proposed Broad based Technical Collaboration Agreement with Siemens . . . . .	4
D. Need for Collaboration, scope of the Agreement and choice of collaborator . . . . .	5
E. Advantages to Siemens . . . . .	10
F. Duration of Agreement and Extension of Technical scope . . . . .	12
G. Payments to collaborators . . . . .	15
H. Turn-over of BHEL under the Agreement . . . . .	18
I. Cost Benefit Analysis . . . . .	19
J. Export Franchise . . . . .	21
K. Licences granted by Siemens to BHEL . . . . .	23
L. Agreement with Third Parties . . . . .	23
M. Right of BHEL to Sub-licence the rights granted under the Agreement to other parties . . . . .	26
N. Grant of rights by BHEL to Siemens . . . . .	27
O. Supply of documents . . . . .	28
P. Training of BHEL Personnel . . . . .	29
Q. Manufacturing facilities and advertising . . . . .	31
R. Delegation of Siemens Personnel to BHEL and Additional Assistant to be rendered by Siemens . . . . .	32
S. Limitation of liability . . . . .	32
T. Penalty clause . . . . .	34
U. Arbitration . . . . .	35
II. Turnkey contract for a power station in Tripoli West, Libya . . . . .	39
APPENDICES	
I. Note furnished by the Ministry of Industry regarding Arbitration clause in the proposed agreement between BHEL and Siemens . . . . .	44
II. Summary of Conclusions/Recommendations of the Committee on Public Undertakings contained in the Report . . . . .	49

633 LS-1

**PARLIAMENT LIBRARY**  
 (Library & Reference Service)  
 Central Govt Publications

Acc. No. B-52818(5)

32 1/18

CAMMITTEE ON PUBLIC UNDERTAKINGS  
(1978-79)

CHAIRMAN

Shri Jyotirmoy Bosu

MEMBERS

2. Shri O. V. Alagesan
3. Shri Maganti Ankineedu
4. Shrimati Chandravati
5. Shri Tridib Chaudhuri
6. Shri Hitendra Desai
7. Shri Anant Ram Jaiswal
8. Shri L. L. Kapoor
9. Shri K. Lakkappa
10. Shri Dharmsinhbhai Patel
11. Shri Raghavji
12. Shri Padmacharan Samantashinhar
13. Shri Bhanu Kumar Shastri
14. Dr. Subramaniam Swamy
15. Shri Madhav Prasad Tripathi
16. Shri S. W. Dhabe
17. Shri K. N. Dhulap
18. Shri H. B. Mahida
19. Shri Murasoli Maran
20. Shri Era Sezhiyan
21. Shri Viren J. Shah
22. Shri Sultan Singh\*

SECRETARIAT

1. Shri H. G. Paranjpe—*Joint Secretary.*
2. Shri T. R. Krishnamachari—*Chief Financial Committee Officer.*
3. Shri T. N. Khanna—*Senior Financial Committee Officer.*

---

\*Elected w.e.f. 26-12-1978 vice Shri Deorao Patil died.

**SUB-COMMITTEE ON BHARAT HEAVY ELECTRICALS LTD.**

**COMMITTEE ON PUBLIC UNDERTAKINGS**

1. Shri Jyotirmoy Bosu—*Chairman*
2. Dr. Subramaniam Swamy—*Convener*.
3. Shri L. L. Kapoor
4. Shri Raghavji
5. Shri Sultan Singh

## INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf, Present this Fiftieth Report on Bharat Heavy Electricals Ltd.

2. This Report sets out the results of a meticulous scrutiny of the terms of the draft agreement for the broad-based long term collaboration with Siemens of West Germany, a multinational Company having subsidiaries in India. The scrutiny ranges over not only technical but also economic and financial covering regularity and propriety aspects.

3. A collaboration of the kind proposed has no parallel. It does not appear to be entirely need-based. A number of unusual features emerged out of the examination which remain largely intact despite modification to the terms effected subsequently. As the matter stands the intended prolonged tie-up is weighted heavily in favour of Siemens and is bound to consolidate its position as well as of subsidiaries in India and result in a transfer of economic surplus from the country.

4. There is an urgent need for the B.H.E.L. to attain self-sufficiency speedily in line, with its own declared policy. For this purpose R & D expenditure should be stepped up in a big way. In the meantime any further collaboration that is absolutely needed should be for a minimum length of time and need based ensuring best possible terms avoiding tie up with one particular organisation. The proposal has therefore to be gone into by a High Powered Technical Body dispassionately.

5. The Sub-Committee on Bharat Heavy Electricals Ltd., considered and adopted this Report at their sitting held on 26th April, 1979 and the Committee adopted this Report at their sitting held on 27th April, 1979.

NEW DELHI;

April 27, 1979.

---

Vaisakha 7, 1901 (S)

JYOTIRMOY BOSU,

Chairman,

Committee on Public Undertakings.

## **BHARAT HEAVY ELECTRICALS LTD.**

### **A.—Historical Background of setting up of Bharat Heavy Electricals Ltd.**

The Power Equipment Industry started in the Country in the early fifties. The Heavy Electricals (India) Ltd. was set up at Bhopal in August, 1956 as a first step in the rapid establishment of adequate capability for manufacturing power plant equipment. A collaboration arrangement was entered into with Associated Electrical Industries of UK for a group of power plant equipment and allied electrical products. The manufacture commenced in 1961. The product profile included transformers, switchgear, rectifiers, hydro sets etc. In 1966, the production of steam turbines was added.

2. In 1959, the Government of India decided to set up additional manufacturing plants for the manufacture of power generating equipment, both thermal and hydro along with associated auxiliaries so as to reduce our dependence on foreign countries in this basic sector of our economy and Agreements were signed with the Governments of USSR and Czechoslovakia for obtaining know-how and import of plant and equipment for setting up the facilities.

#### *Heavy Electrical Equipment Plant, Hardwar*

3. In 1964 agreements were entered into with M/s. Prommashe-export for supply of manufacturing documentation of heavy electrical machines, steam turbines and turbo generators and hydro turbines. The construction commenced in 1964 and production in 1967. The production profile included manufacture of Thermal sets of 50 MW, 100 MW and 200 MW capacity, Hydro sets and Heavy and medium size electrical machines.

#### *Heavy Power Equipment Plant, Hyderabad*

4. This plant has been set up with assistance from Czechoslovakia. The first project report for the Heavy Power Equipment Plant at Hyderabad was submitted by Technoexport, the collaborators from CSSR, in November, 1960, for manufacturing 12 MW and 25 MW TG sets. Subsequently, the range was changed to 60 MW and 110 MW in the next two years. Therefore, a supplementary report was submitted in 1963 which was accepted by the Government of India. The construction of this plant was commenced in 1963 and production in 1965.

5. In 1964, the proposal to take up manufacture of Air Blast Circuit Breakers in collaborations with M/s. ASEA of Sweden at Hyderabad was accepted by the Government of India and collaboration was entered into in 1965.

### *High Pressure Boiler Plant, Tiruchi*

6. In June, 1961, an agreement with M/s. Technoexport of Czechoslovakia was entered into for the preparation of a project report for establishing a high pressure boiler plant including boiler auxiliaries. The construction of the plant was commenced in 1963 and the plant was inaugurated in May, 1965 with the manufacture of valves.

### *Formation of BHEL*

7. In November, 1964, a new Company was formed to take over the management and control of the plants at Hardwar, Hyderabad and Tiruchi under the name of Bharat Heavy Electricals Limited. The new Company commenced business with effect from November 17, 1964.

8. In 1971, a high power action committee was constituted by the Government to review the working of the various public sector plants. The Committee recommended amalgamation of Heavy Electricals (India) Limited (HEIL) and Bharat Heavy Electricals Limited (BHEL) into a single Company. HEIL was merged with BHEL in January, 1974.

9. Over the years, it has emerged as one of the largest engineering companies in India covering a wide spectrum of activities. It serves a large number of sectors, the more important being Energy and Industry. The manufacturing range included Steam & Hydro Turbines, boilers, transformers, switchgear, electrical motors, traction equipment, compressors, pumps, heat exchangers, castings and forgings.

10. BHEL has 10 manufacturing divisions and eight engineering and service divisions. The total employment is nearly 60,000 of whom over 12,000 are qualified engineering/technical personnel and 35,000 are skilled/semi-skilled artisans. In terms of the product range, the industries served, manpower and complexity of the organisation etc. BHEL compares with leading organisations in the world. BHEL has at present 23 technical collaboration agreements with foreign firms.

### **B.—Collaboration Agreements with M/s. Siemens/Kraft Work Union of West Germany**

11. BHEL has at present three collaboration agreements with Siemens who are a West German Multinational firm and one with their subsidiary Kraftwerk Union (KWU). These collaborations are for the manufacture of (i) Industrial Drive Turbines; (ii) Thyristor Converter & Application Engg.; (iii) Thyristor Devices and Silicon; and (iv) Large Steam Turbine Generators.

12. The details of these collaboration agreements are given below:



S. No.	Field covered by the Agreement	Date of signing the Agreement	Duration	Payment terms	No. ally
1	Design and manufacture of High speed drive turbines	June, 1974	10 years DM 1.5 Million	Lumpsum	4% on domestic sales. 4.5 on exports.
2	Thyristor Power Converter, associated Control Equipment and application Engg.	July, 1975	8 years DM 0.7 Million		5%
3	Thyristors Power Diodes and Mono crystalline Silicon	Oct., 1975	8 years DM 0.75 Million		5%
4	Large Steam Turbine (KWLU) Generators of 200 MW to 1000 MW.	August, 1976	15 years DM 7.3 Million		4% on first 5 sets. 3% on next sets. 2% thereafter. 5% on exports. 4% on components. 2-5% on components used in other T.G. Sets. 5% on Miscellaneous insulation

### **C.—Proposed Broad-Based Technical Collaboration Agreement with Siemens**

13. Bharat Heavy Electricals now propose to enter into a broad-based technical cooperation agreement covering a wide range of products and systems.

The existing collaboration with K&M for large Turbo Sets, would continue as a separate agreement and will be implemented accordingly. The other three existing agreements with Siemens viz for industrial drive turbines, thyristor converters and/application engineering and thyristor devices are proposed to be terminated and their scope brought under the agreement. The proposed agreement covers products like transformers, switchgear motors, hydro-generators, power electronics, T.G. sets upto 200 MW condensers, porcelain etc. and system engineering for power and industrial fields. The agreement is for a period of 15 years and it envisages a payment of DM 50 million a lumpsum payable in 10 yearly instalments and a royalty of 1.8 per cent on the turn-over covered under the technical scope of the agreement.

14. The Committee on Public Undertakings took up for examination in May, 1978 inter alia Bharat Heavy Electricals Ltd. There has been a public debate on the proposed broad based technical collaboration with Siemens, especially in the recent months.

15. On 17th July, 1978 ten Members of Parliament addressed a letter to the Chairman of the Committee on Public Undertakings wherein they drew the attention of the Committee to the proposed Technical Collaboration Agreement with Siemens Ltd., of West Germany and stated that "such an agreement will tie up BHEL with a Multi-National for a long number of years and Research and Development by R & D unit of BHEL will be the biggest casualty." It was further stated "this agreement will be extremely harmful in the interests of country." The Members of Parliament desired that the Government should be asked not to finalise the agreement with Siemens till the examination of Bharat Heavy Electricals Ltd., is completed by the Committee on Public Undertakings. The Committee after considering the letter from the Members of Parliament as well as Press reports regarding this agreement decided that the examination of BHEL should be done on a priority basis.

16. On 24th July, 1978, the Committee requested the Ministry of Industry (Department of Heavy Industry) to defer finalisation of the agreement until the Committee reported on their findings. The Ministry were also requested to furnish a copy of the draft collabora-

tion agreement with Siemens. A copy of the draft agreement was made available to the Committee only on 8th February, 1979.

**D.—Need for Collaboration, scope of the agreement & choice of the collaborator.**

16-17. In regard to the proposed broad-based proposed collaboration agreement with Siemens the Committee heard the views of Shri P. Ramamurthy, M.P. who felt that there was no need for such a broad-based collaboration agreement. Shri P. Ramamurthy *inter alia* stated as follows:—

“When BHEL was conceived, it was conceived as a project which, although, in the initial stages, will have to buy technology from foreign countries because it is not available in this country on favourable terms, by and large, BHEL will gradually become an organisation which will not depend on foreign collaboration from time to time—although collaboration may be there in limited fields. This was the conception in regard to all public sector undertakings and collaboration agreements in this country.”

He further stated:—

“In 1974, the BHEL came out with what is called the first corporate plant. In that corporate plant which has been there, the objectives and the goals have been clearly laid down. If you have got a copy of the objectives and the goals of the corporate plant, you will see that one of the objectives that has been laid down is to develop research and Development activities in such a way as to reduce the dependence on foreign technology and to keep the industry continuously uptodate. The reduction of the dependence on foreign technology is the goal that has been emphasized. That has been one of the objectives presented by BHEL before the people since 1974. The agreement that they are now entering into has nothing to do with the objective that they have clearly laid down. On the contrary, it goes completely against the objective in placing the R&D activities at the mercy of Siemens.”

The witness further stated as follows:—

“In my opinion, this agreement, if it goes through, will be a total sell out of the BHEL to the Siemens. It will kill the research and development activities of the BHEL and it will also kill all other developmental activities that are taking place.”

18. In a detailed letter addressed to the Chairman, Committee on Public Undertakings, a senior executive of the BHEL forwarded a copy of his note on the proposed collaboration agreement which he had submitted to the Chairman, BHEL in middle of January, 1978. In this note he *inter alia* stated as follows:—

“Considering its potential to defeat our declared objective of establishing an Engineering, Technological and R&D base that is self-reliant and self-sustaining, the proposal for the broad-based agreement may be dropped though it is likely to give a boost to our production and contribute to our operational stability. The long term and broad-based nature of the collaboration especially the part pertaining to systems and application engineering are extremely harmful to BHEL and the country at large.”

19. The executive was later called by the Committee to tender oral evidence. Asked if he had expressed his views before the Management he stated that he had given written comments about the agreement to the then Chairman, BHEL in January, 1978 but his note was not circulated.

20. About the proposed agreement, the witness stated as follows:—

“Specifically, it was my opinion that with regard to the present stage of development of our country, this collaboration agreement does not suit either BHEL or the country basically for two reasons; firstly, the proposal does not discriminate between areas in which we do require collaboration or do not require collaboration because we have our own capability. Secondly, its long-term nature. That is, for 15 years extendable for further 10 years. In my opinion from both these angles the collaboration proposal was a deviation from our earlier practice of going into need based collaborations.”

21. During evidence the ex-chairman, BHEL stated that Siemens were not the number one in many products. Asked as to who was number one in turbine, the witness stated General Electric of U.S. The representative of Hindustan Brown Boveri Company who were also called to tender evidence informed the Committee, “In some fields, I have no doubt that there could be people who are better than Siemens. It may not always be Brown Boveri. Asked to give an example, the witness stated, “there can be General Electric, U.S.A.”

He added:

"In Switch gear we should think we are leading. But, then, we have always been thinking that we will make it ourselves. There are other fields like the Railway Signalling equipments where Siemens be considered to be one of the leading companies in the world. If it comes to certain kinds of turbines—steam or gas turbines—we would think that the leading positions come to G.E.C. of U.S.A. and Brown Boveri."

22. The Committee enquired if the scope of the agreement should be restricted to the minimum field, the Witness stated:

"I would think one way of restricting the agreement would be to cut it in parts to find out the merits of each package and of the various competitive offers that can be called for to meet that package."

23. The Committee enquired if BHEL had received any objections from any quarter particularly from the Research and Development Unit in regard to the proposed Technical Collaboration Agreement with Siemens.

24. In a note submitted to the Committee BHEL have stated as follows:—

"No specific objection as such had been received from any unit in regard to the proposed 15 year technical collaboration agreement with Siemens Limited. The need for the agreement was finally accepted in a combined meeting of the Marketing and Engineering Committees on 7th April, 1978, wherein all the units and all the concerned Engineering Development Managers were represented.

During the various stages when the proposal was under examination, communications were received giving suggestions and provisions to be included in certain specific areas. The relevant suggestions came up for detailed discussion in the meeting of 7th April, 1978, referred to above and were considered before the decision to go in for the agreement was finally taken."

25. During evidence the Chairman BHEL, stated that nobody totally objected and that he had not found any such objection in the available records.

26. In regard to the Choice of the Collaborator, scope of the agreement and the need for the agreement BHEL have in a note furnished to the Committee stated as follows:—

#### *Choice of Collaborator*

27. In September/October 1976, an official delegation led by the then Secretary (HI) visited West Germany, reviewed the programmes for implementation of these agreements and met with the top management of Siemens, discussed various aspects of mutual interest and visited wide range of facilities. On return, the Secretary (HI) in his report suggested that in view of the complementary nature of operations of BHEL and Siemens AG, top officials of two companies should meet to draw up proposals for the possibilities of future association between the two organisation, to the mutual benefit of both. The present proposal is a logical culmination of these discussions.

28. In electrical equipment field, GE, USA, Siemens AG, West Germany and BOC, Switzerland are the top three companies in the world. It may be mentioned that Siemens along with its subsidiaries KWU and TU, have a wide product-mix matching that of BHEL. They have a large R&D base and their annual expenditure on R&D is among the largest in the world. BHEL's experience show that they are co-operative in sharing of R&D, training of BHEL engineers, joint development programmes and transfer of know-how and know-why. During different stages of the negotiations, teams from different product areas and different plants of BHEL have visited Siemens' factory's design and development facilities. They have assessed the current level of technology, manufacturing methods, research and development capability and efforts of Siemens. These visits, by a broad group of experienced engineers, has also established that BHEL's technological progress will be accelerated by this collaboration with Siemens.

#### *Scope of the Agreement*

29. The agreement covers basically the following major products and system technology:

- (i) Electrical rotating machines like generators, motors, etc.
- (ii) Transformers of various ratings and types excluding 400 KV power transformers.
- (iii) Switchgear.

- (iv) Steam turbines upto 200 MW including surface condensers of all types and ratings.
- (v) Electro-procelains, and
- (vi) Control equipment and a number of other items.

30. The area of systems technology covers a number of industries, transportation systems, electric propulsion systems and other transmission systems. The agreement provides for supply of adequate documentation. Normally, a collaboration agreement covers products or systems which are well-defined by type or otherwise. In this agreement, BHEL can obtain documentation relating to any type of the products/systems covered under the agreement including any developments and new inventions.

31. There is a provision of 1800 man-months of training under this agreement, a portion of which has been set aside for doing actual project engineering work by BHEL engineers in the Siemens engineering divisions etc. relating to BHEL's contracts.

32. The proposed agreement also provides for both parties to have adequate access to the laboratories and information about development programmes of the other party, carrying out of joint development programmes and placement of BHEL engineers in Siemens' establishment.

#### *Need for Collaboration*

33. BHEL is presently manufacturing a wide range of electrical products in its various plants based on technology obtained under various collaboration agreements concluded in late fifties and early sixties. Most of these collaborations related to specific products and did not cover systems know-how and technological know-how.

34. In such a high technology area, the Undertaking must continuously assess the technological standing of its products relative to the products offered by the competitors. The studies carried out by BHEL have established that in the next phase of development, it is essential to:

- (i) update product technology.
- (ii) rationalise production and adopt integrated design philosophy for each product.
- (iii) develop system engineering capability, and
- (iv) give thrust to developing long term engineering strengths by supporting a strong research and development programme with necessary laboratories and equipments.

35. In order to achieve these objectives, some steps have already been taken by BHEL. For systems engineering development, relevant project divisions have been set up. Basic and applied research development facilities have also been established. Extensive testing programmes to obtain feed back data for analysing and improving product design have been initiated. Training and grooming of engineers and specialists has also been systematically started. While all these steps are in progress, it has been realised that gaps in all these areas cannot be bridged within an acceptable time-frame through in-house efforts alone. As such, there is a strong need for BHEL to enter into a technical collaboration to bridge these gaps.

#### E. Advantages to Siemens

36. In regard to the advantages to Siemens as a result of the proposed agreement BHEL have stated as under:—

37. Siemens is a Corporation offering a very wide spectrum of products and systems in a high technology area. The R&D required to sustain such an operation has necessarily to be of large proportions and Siemens annually spend about 8 per cent of their turnover in R&D. Since the domestic market available to Siemens viz. the Federal Republic of Germany is not large enough to generate economies of scale on the capital and technological investments required in this field, Siemens have internationalised in a big way. Besides direct exports and setting up of subsidiaries/joint ventures abroad sale of technology helps Siemens in generating revenues to support the R&D programmes to enable them to have continuously products that are technologically upto-date and that provide them a competitive edge. Licencing revenues are an important income to sustain the R&D efforts. Siemens naturally encourage licence agreements only with companies that have large operations and have growth prospects. Since India has a large power programme in the coming years and BHEL is the major manufacturer of power equipment in India enlarging the areas of technical collaboration with BHEL fits in with Siemens company policy and objectives. Their experience with BHEL in the last 3 years must have supported such a perception. BHEL have proved to be an efficient license absorbing technology rapidly and has achieved a good market share in the products and systems under existing collaboration agreements with them.

38. As part of the compensation Siemens will receive payments on account of the lumpsum and royalty. Siemens would also be getting, especially in the first few years, during phased indigenisation orders for components from BHEL. After BHEL establishes the technology for manufacture of Contract Products to the design



and quality requirements of Siemens, it will be possible for Siemens to buy back from BHEL a number of components for incorporation in their equipment to sell in Germany and outside. While BHEL will, no doubt, be selling the components to Siemens at a fair price, which will ensure a reasonable return, it may still be more advantageous to Siemens to buy components from BHEL, rather than set up facilities for manufacture of these components in Germany. This is primarily because of the high cost of operations and labour in Europe. This arrangement will also provide Siemens a greater flexibility to undertake a larger amount of export orders than could have been done otherwise.

39. The proposed Agreement envisages joint development programmes and coupling of BHEL's technical personnel with the experienced R&D teams and facilities in Siemens. This strategy would enable Siemens to make optimum use of R&D facilities available with them by getting the benefit of additional inputs in the form of qualified man-power from BHEL. The resultant benefits would flow to both the parties under the Agreement. An important technical input which is valuable to Siemens will be the feed-back on operational aspects of equipment manufactured by BHEL, using Siemens know-how and operating in the Indian market. This will help both BHEL and Siemens in carrying out modifications and improvements to existing products as well as in developing new products.

40. The increasing trend all over the world is for turn-key projects in all sectors like Energy, Industry, etc. Total projects are being executed which incorporate boilers, turbines, generators with all their associated auxiliaries and for industrial projects, compressors, driving turbines, industrial steam generators and associated auxiliaries. In many of these product areas like boilers, compressors and their auxiliaries, BHEL has internationally acceptable products, know-how for which has been obtained from leading organisations like Combustion Engineering, Nuovo-Pignone etc. It can be expected that in the coming years, Siemens and BHEL together would be able to operate as members of Consortia for undertaking turn-key projects, to the mutual advantage of both parties. But for the development of BHEL as a versatile partner in the field of manufacture of electrical equipment, Siemens would have to find an alternative source for these items in Europe and such an arrangement would not be cost effective.

41. During the period of the Agreements, Siemens would be obtaining from BHEL lumpsum payments to the tune of DM. 50 million (subject to tax) and net royalties after tax to the tune of Rs. 49.51 crores. It is also estimated that components to be procured

from abroad during the currency of the Agreement will be of the order of about Rs. 45 crores per annum. BHEL will be free to buy these components from anywhere but, subject to their being competitive, about 40 per cent of these may be procured from Siemens. There may be a few items like Simatic cards which may have to be purchased from Siemens till such time as other sources are established to avoid undue dependence on Siemens and to ensure that the desired alternative sources are established, BHEL is mounting a developmental effort with other associated agencies like ECIL, etc. for developing these components.

#### **F. Duration of Agreement and Extension of Technical Scope**

42. As per terms "the agreement shall be valid for a period of fifteen years. It shall, however, be open for an extension period—subject to the approval of the competent authorities including Government of India—of another ten years—on terms to be agreed to. For this purpose, during the twelfth year of operation of this co-operation the parties agree to initiate discussions."

43. The agreement further says:—

"If the parties have not reached a binding understanding by the end of the twelfth year that the Agreement shall be extended for another period, Siemens is not obliged to furnish information on new developments from the thirteenth through the fifteenth year. In such case information on new developments shall, however, be available to BHEL in this period if the parties agree on the terms therefor and after getting the approval of Government of India"

44. In regard to the duration of the agreement the guidelines issued by the Bureau of Public Enterprises issued in May, 1977 provide as under:—

"The agreement should be for a definite period which should be fixed on a realistic but strict basis according to the merits of each case in close consultation with the concerned enterprise, DGTD, National Commission on Science and Technology, Bureau of Public Enterprises etc. There should be built in mechanism by which absorption of technology is facilitated within the period of collaboration agreement. The Administrative Ministry should take steps to monitor the progress of collaboration at different stages right from the commencement and also undertake a critical mid-term appraisal of the progress of

collaboration in close coordination with the Bureau of Public Enterprises, DGTD and National Commission on Science and Technology with a view to take suitable remedial measures in time so that the necessity of extending the period of agreement is obviated. The period of 5 years normally allowed for collaboration should not be taken for granted. It should be the endeavour of Public Enterprises to reduce the period of collaboration to less than 5 years and attain self-reliance at the earliest by fully absorbing and indigenising the technology and know-how. Ministries/Undertakings should make a critical review of such agreements, where the duration of agreement has exceeded the prescribed limit of 8 years with a view to find out the specific reasons for such a long duration. Extension of agreement beyond period of 8 years should be brought to the notice of Parliament."

45. In regard to the justification for having the agreement for such long period the Chairman, BHEL stated follows:—

"The R & D in the BHEL is a young organisation. R & D facilities have not been built up to that extent, and the type of basic data collection built out of research, it will not be an easy matter for BHEL to accomplish within a limited period of time, and without that information it will not be possible for us to design it. After designing it, prototypes will have to be introduced, and they will have to be tried for a fairly long period of time, if we are to be self-sufficient."

46. When the attention of the representatives of the Ministry was invited to the guidelines issued by the Bureau of Public Enterprises Financial Advisor of the Ministry explained "this is the first agreement of its kind with regard to assistance technology. This is a case which stands on its own. What the Bureau tried to codify is the guidelines relating to normal collaboration agreement for a specific product". The witness further stated that the guidelines do not apply to "assistance technology". Asked if this was 'specifically laid down in the guidelines, the witness said, "it does not say in that way. It is a question of interpretation".

47. The Committee enquired about the justification for the stoppage of information on new development after 12th year. The Secretary of the Ministry stated:—

"In a collaboration, there are two types of information. One is normal developments, another is unusual development.

The normal development is something, which will get passed to us. All improvements and information will be made available to us till the last day of the 15th year. But what is meant by this 12th year clause is that if the Government of India has no intention of renewing it after the 15th year, any unusual development, any new development that takes place, is not likely to be passed on to us. Incidentally, in our other agreements right from the first year, for unusual development, there is no commitment and we have got to pay and in fact, this is somewhat of a favourable nature."

48. There has been a public debate on the proposed broad-based long term collaboration agreement between BHEL and Siemens of West Germany—a multi-national company represented in 450 cities in 120 countries. The matter had also figured in the discussions in both Houses of Parliament. A Siemens Collaboration of the kind proposed covering as it does a wide area and time span, is admittedly without a parallel. Further according to the existing guidelines issued by Govt. on the basis of earlier recommendations of the Committee, period of collaboration where necessary has to be less than 5 years rather than more and that even in the case of existing collaborations any extension beyond a period of eight years has to be brought to the notice of Parliament. For these reasons the Committee's examination of this proposal was required and valid.

49. BHEL has by now a long experience in the field of power equipment industry. They had already entered into a number of collaboration agreements, which are currently 23. Of these, 4 are with Siemens of West Germany and their fully owned subsidiary KWU. The Committee have been informed by responsible persons who appeared before them that on the top of all this the proposal for entering into a broad-based long term collaboration with Siemens would be detrimental to the research and development activities and would run counter to the declared objective of the first Corporate Plan (1974) of the BHEL of reducing dependence on foreign technology. It has also been stated that indiscriminate collaboration covering such a wide range was not justified as it was not all need-based. Admittedly, Siemens are not the best in many products covered by the technical scope of the proposed collaboration.

50. The Committee find that no inquiries were made from other leading power equipment manufacturers in the world and that the proposal was negotiated with Siemens only. Ironically, the existing collaboration with this multi-national and its subsidiary has been put forward as a justification for broad-basing it. It has been argued

that certain gaps in knowledge could not be bridged within an acceptable time frame. The Committee received an impression that the existence of a number of collaborations has perhaps affected their urge to become wholly self-reliant. The remedy proposed will therefore be worse than the disease.

51. Though the draft agreement says that the arrangement will be for the mutual advantage of BHEL and Siemens it appears that Siemens will be a far greater gainer. In fact this has been neatly put by BHEL itself as brought out in Paragraph 38 of this Report. This is perhaps the reason why all kinds of indirect coercion to perpetuate the tie-up has been sought to be brought into the agreement. The agreement will be for a period of 15 years subject to an extension by another 10 years. However, if a decision is not taken to extend it by the 12th year information flow to BHEL on new developments will cease. A prolonged tie-up of this kind with a multinational having local subsidiaries is bound to result in consolidation of the subsidiaries and transfer of economic surplus from a country in a cheap labour situation like India not to speak of exploitation of natural resources.

52. The Committee had closely scrutinised the terms of the draft agreement and their findings are set out in the succeeding section of this Report.

#### G.—Payments to collaborators

53. As per the terms of the proposed agreement "In consideration of the technical assistance rendered by SIEMENS in GERMANY, comprising the supply of 750,000 pages of documentation and the training of BHEL personnel for a period of 1200 man-months, BHEL shall pay to Siemens a lump sum subject to deduction of applicable Indian income taxes in the amount of DM 50 Millions in 10 equal instalments. The first instalment shall become due and payable within four weeks after this agreement becomes effective, the second instalment by the end of January, 1979 and each subsequent annual instalment by the end of January of each following year.

54. The transmission of more than 750,000 pages of documentation is subject to an understanding about terms and conditions therefor and further subject to approval of Government of India.

55. In 1978, Siemen charge costs at the rate of 16 DM per page of documentation. In subsequent years, this rate will be subject to an escalation clause.

56. The training of more than 1800 month is subject to an understanding about terms and conditions therefor.

57. In 1978, Siemens charges training costs at the rate of 7,000 DM per man-month. For subsequent years, this amount is subject to an escalation clause.

58. In consideration of the grant of rights under patents and information of Siemens, BHEL shall pay to Siemens royalties in the amount of 1.8 per cent of the "Computation Basis, subject to deduction to applicable Indian Income taxes." In reply to questionnaire BHEL has stated that the royalty of 1.8 per cent was payable on the turn-over covered under the scope of the agreement.

59. Clarifying the position BHEL, in a note furnished to the Committee have stated as follows:—

"Under the proposed agreement, royalty will be payable on systems designed by the BHEL, adopting Siemens know-how, even when only part of the hardware is of Siemens design. The royalty computation methodology provided for in the agreement is such that the items manufactured by the BHEL, whether to Siemens design or otherwise will not attract royalty twice, even if they are electrical products. As far as mechanical products manufactured by BHEL are concerned, no royalty at all is payable to Siemens, either as a product or as part of a system."

60. The Committee pointed out that the payment terms of the existing terms of agreements and the proposed agreement with Siemens had not been stated in as manner that a comparison could be made. They therefore desired to be furnished with a statement indicating the average rate of royalty payable in each case after taking into account the present value of the discounted cash flow both in respect of payment of royalty (lumpsum and percentage rate) and turn-over over the stipulated period.

61. Comparative statement of payments to collaborators as furnished by BHEL is reproduced below:—

(Rs. in Lakhs)

S. No.	Name of the firm	Products covered	Years covered	Out turn	Payments towards lumpsum & Royalty	Dis-counted out turn	Dis-counted payment towards lumpsum & Royalty	% age (8) to (7)
1	Siemens Ac, West Germany	Industrial Drive Turbines	1974-84	20283.90	758.73	8013.14	315.17	3.93
2	Do.	Thyristor power converters and Application Engg.	1975-83	10970.00	469.85	4726.62	208.03	4.40
3	Do.	Thyristor Diodes & Power Devices	1975-83	1550.00	69.82	606.94	36.18	5.96
4	Kraftwork Union, W. Germany	Large Steam Turbines/generators 200MW-1000MW	1976-91	176300.00	3591.17	49339.18	1145.15	2.30
5	Siemens AG, West Germany	Proposed Agreement	1979-94	503150.00	10082.00	171524.00	3739.00	2.19

62. It has been stated that computation has been done by taking the out turn and the projected payments over the currency of the arrangement(s) and discounting these for the first year of the respective agreement.

#### H.—Turn-over of BHEL under the agreement

63. During evidence of the representatives of BHEL the Chairman, BHEL, stated that the turn-over of BHEL covered by the proposed agreement would be 19 per cent of the total turn-over of BHEL by 1983-84. Asked if it would increase or decrease in subsequent years, the witness stated:

“it will stabilize at 19 per cent.”

64. The ex-Chairman, BHEL however informed the Committee at a subsequent sitting that the turn-over covered by the proposed agreement would be about 70 per cent of the total turn-over.

65. In view of the vast disparity in the figures furnished to the Committee by the Chairman, BHEL and ex-Chairman, BHEL they examined the representatives of BHEL again at the subsequent sitting. The Chairman, BHEL informed the Committee that total turn-over of BHEL for the duration of the agreement is expected to be about Rs. 20,000 crores of which about Rs. 5031 crores will be covered by the proposed collaboration and Rs. 4000 crores will be covered by the existing collaboration agreement with the Siemens/KWU which would continue as separate agreements. He added “we have obviously calculated that it would be about 18 per cent under the previous agreement and 19 per cent under the new agreement. 37 per cent is what we have computed by end of 83-84.”

66. The Chairman, BHEL further informed the Committee that by the end of 1983-84 the total turn-over will be about Rs. 2,200 crores annually. There will be growth rate of 5 to 6 per cent every year during the next two five year periods. For the five years period of 1989—94 the Computation is that the total turn-over may be of the order of Rs. 9,800 crores. Asked about the turn-over attracting royalty at the end of last year, the witness stated that approximate turn-over will be 2,000 to 2,500 and royalty attracting will be about 900 to 1,000 crores.

67. Asked to comment on the information furnished to the Committee that the turn-over by the proposed agreement would be about 70 per cent of the total turn-over, the Chairman, BHEL stated, “It cannot be more than 37 to 40 per cent.” He added:

“Why I am saying that there is no chance of this thing going above 40 per cent is because some of the important items



like the boilers, boiler accessories etc. are not included. They are the heavy items of the BHEL. The chance of the collaboration with Siemens both in respect of past and the existing agreement is not likely to give more than 40 per cent."

68. Asked about the basis on which the turn-over had been estimated, the witness stated as follows:—

"We have worked out roughly the various products covered in this collaboration and so much of the products expected in the course of 15 years will be met like that. They put the figure at about 5,000. That is how it is worked out. Actually speaking, it cannot be said to be very very accurately. It can only be forecast."

#### I.—Cost-Benefit Analysis

69. The Committee enquired whether any benefit-cost analysis of the collaboration had been made. If so, what was the internal rate of return of the investment, viz., payment of royalty and the cost of adoption of the technology. In a note submitted to the Committee BHEL have stated as follows:—

"The existing guidelines do not provide for computation of internal rate of return for collaboration agreements. The application sent to the Foreign Investment Board on the basis of which the collaboration agreements with Siemens and KWU were approved, were given in the prescribed format. The information given covered *inter alia* the estimated value of annual production, the lumpsum and royalty payments, the foreign exchange outgo and foreign exchange savings anticipated."

70. During evidence of the representatives of Foreign Investment Board the Committee enquired if Scientific cost benefit analysis establishing internal rate of return on the basis of expected improvement in the turn-over, profitability and profits was not necessary. The Chairman, FIB stated:—

"I would say that in matters of technical collaboration it is not always possible to establish with any degree of firmness the internal rates of returns particularly when we are dealing with inputs which are only a small part of the total cost of production and we are dealing with output which is expected to materialise over a period as long as

10 to 15 years. Subject to these limitations, the Board does take into account and has taken into account all relevant considerations."

71. The Secretary of the Ministry of Industry stated as follows:—

"Normally we insist and we do make cost-benefit study in areas where a new product is started or where we start a new venture. For instance, when we put up a plant in Jhansi for the manufacture of transformers, we made a cost-benefit analysis. When we introduce a new product, we do make a cost-benefit analysis. When we make additional investments, we do make a cost-benefit analysis. The present collaboration is in respect of updating the technology of the existing product. I will submit the proposition to you in a slightly different manner. What would happen to this organisation, a large organisation, if they do not update this technology and remain with the present state of technology? When we go in for updating technology, at this stage, the cost-benefit analysis can be only qualitative because if they do not update their technology, they will go out of business."

72. The Committee find that the value and nature of components to be supplied by BHEL to M/s. Siemens and the value and nature of components to be supplied by M/s. Siemens to the BHEL under the proposed agreement has not been estimated. They therefore, enquired how any indication could be given to Foreign Investment Board about the foreign exchange outgo and inflow at the consideration stage. During evidence, the Chairman, BHEL stated as follows:—

"It is too early to say which components it will be possible for us to sell to Siemens at this stage. Our expectation is that as indigenisation takes place, it should be possible for us to sell some components to them. But to exactly quantify it is not possible.

For the purpose of foreign exchange savings what we have worked out is the incremental savings in foreign exchange—that is, we have taken into account the value of certain equipment which we will be manufacturing now but which we would not have been able to manufacture but for this collaboration."

73. Under the title 'consideration' in the draft agreement there is a mention of payment for purchase of products from Siemens

India, Bharat Bijlee and Cable Corporation of India. During evidence the Committee enquired about the purchases to be made from the subsidiaries of Siemens. The Chairman, BHEL stated "so long as BHEL is producing the same equipment there is no reason why we have to go to them and the idea of this collaboration is to up-to-date the technology and be able to manufacture". He added:—

"If in the system we have to buy components either from Siemens or their licences in India and we do not have to pay royalty. We do not expect our purchases from Siemens or their subsidiaries will be of any appreciable extent."

#### J.—Export Franchise

74. As per terms of the draft agreement "BHEL and Siemens concur that in principle BHEL may sell contract products and systems world wide except to countries where Siemens has prior commitments.

75. The category A comprises, for certain contract products and systems such countries where BHEL is free to sell such contract products directly and indirectly.

76. The category B comprises such countries where BHEL may sell certain contract products and systems (directly or indirectly) after prior agreement with Siemens.

77. The Category C comprises all other countries where BHEL may sell contract products and systems directly or indirectly on a case to case basis.

78. There is no country to which BHEL will be able to export all of the contract products and corresponding system free of any restriction.

79. The agreement stipulates that:

"BHEL and Siemens will establish a procedure for BHEL furnishing relevant information relating to BHEL's projects quotations and export sales to category A countries upon request with the objective of assisting and improving BHEL export performance".

Quotations by BHEL to countries of the category B are subject to the following procedure:—

- (a) Quotations by BHEL not exceeding an amount of DM 500,000, require only the prior written notification to

SIEMENS. SIEMENS may ask BHEL for specified reasons not to quote and BHEL may thereafter at its sole discretion decide to pursue the project.

- (b) Any other quotation by BHEL requires the prior written notification of SIEMENS and a prior agreement between the parties.
- (c) If BHEL is in a position to meet the following points or any other points which are of major importance—
  - Financial aid from Indian sources.
  - Exports for investment projects of the Indian industry.
  - supplies to Indian consortium leaders and general contractors.
  - substantial previous BHEL supplies.

SIEMENS Shall not unreasonably withhold its consent.

- (d) If SIEMENS (respectively a subsidiary of SIEMENS) is not interested in pursuing the inquiry, the consent shall not be withheld.

SIEMENS agrees to form consortiums with BHEL in the case of projects outside of INDIA which are of mutual interest. The parties shall also—upon request by one of the parties—consider the feasibility of joint quotations, sub-supplies and other joint efforts.

Quotations by BHEL to countries other than those of the categories A and B require in each case the prior written approval of SIEMENS which SIEMENS at its own discretion and without giving any explanation may withhold.”

Quotations to countries of all categories for export of spare parts of contract products that have been originally delivered by Siemens previously require in each case the prior written approval of Siemens.

80. During evidence the Committee enquired if it was not somewhat intriguing to find that BHEL had proposed to inform Siemens all the details of quotations that they might give for exports and if it would not amount to compromising on secrecy. The Committee desired that if the Chairman, BHEL was not in a position to answer the question, a written note might be furnished to the Committee.

The witness promised to do so. However no note has been furnished by BHEL\*.

#### K.—Licences granted by Siemens to BHEL

81. The Memorandum of understanding co-operation between BHEL and Siemens as circulated by the then Chairman, BHEL to executive Engineers of BHEL on 13th December, 1977 stated that BHEL recognised certain areas of interest of Siemens and Siemens India. The Memorandum further stated that Siemens, Siemens India and BHEL agree that Siemens India may enter into these areas either independently, or subject to Government of India approval, jointly with BHEL. Both parties shall continually review these proposals before any steps are taken for implementation."

82. At the meeting of the Board of Directors held on 9th December, 1977 one of the Directors desired that the agreement with Siemens should not have any possible implications with any of the subsidiaries of India.

83. During evidence held on 4th April, 1979, the Committee enquired why such a position has been accepted that BHEL cannot enter independently in areas of interest of Siemens India, a subsidiary of Siemens. The Chairman BHEL stated:

"That clause was deleted in December (1977)."

#### L.—Agreement with Third Parties

84. In regard to the BHEL's right to obtain technical know-how from other sources if the needs of BHEL cannot be met by Developments of Siemens, the relevant clause in the agreement reads as follows:

"Wherever there is a need for BHEL to obtain know-how in specific areas falling within the TECHNICAL SCOPE from foreign companies operating either in India or abroad, BHEL shall consult SIEMENS in advance. With a view to

---

\*At the time of factual verification Chairman, BHEL has in a note submitted to the Committee stated as follows :—

Schedule-A countries, by definition, are those countries to which BHEL is free to see specified contract products. Since BHEL is entitled to sell specified products freely to Category-A countries, Siemens is evidently willing to assist BHEL in improving the export performance to Schedule-A countries for those products. The clause does not stipulate that the details of quotations and projects are to be furnished prior to their being opened and made known in those respective countries. As such, there is no compromise to secrecy of quotations. The objective of this clause being to assist and to improve BHEL'S export performance, no information need be given which will go against this objective.

supporting the development of the co-operation under the AGREEMENT BHEL shall, other things being equal, give SIEMENS preference over the other sources. In case BHEL enters into an agreement with a third party, such agreement will take into account the objectives and interests of SIEMENS AND BHEL.

In such a case Siemens reserves the right to withhold the further flow of information to BHEL for the specific area, if Siemens is of the opinion that its interests are seriously affected, and/or Siemens is entitled to license other parties in India.

In case Siemens' information is used for the specific area subsequently, such area will continue to be part of the computation basis.

85. At the meeting of the Board of Directors held on 29th October, 1977 one of the Directors wanted it to be ensured that the right of BHEL to enter into any other collaboration agreement for any product mentioned in, the Siemens agreement should be suitably safeguarded.

86. At the joint meeting of the Corporate Engineering and Marketing Committees held on the 7th April, 1978, Executive Director (Commercial) also expressed the view that BHEL should have the option to go to any other collaborator as and when it was found necessary to do so by BHEL. He desired that this point should be borne in mind before finally accepting the proposal.

87. During evidence the Committee desired to know the implications of the clause in the agreement according to which prior consultation with M/s. Siemens was necessary and further flow of information to BHEL in specific areas could be withheld in case the interests of the Siemens were affected. The Chairman, BHEL informed the Committee that the particular clause has been suitably modified.

The modified clause reads as follows:—

“It is expected that during the term of the AGREEMENT, the technical know-how offered by SIEMENS to BHEL will meet BHEL's requirement. However, if the need arises and based upon technical and economic assessment, the needs of BHEL cannot be met by developments of SIEMENS or joint development with BHEL or modifications of items covered by the TECHNICAL SCOPE, BHEL is free to obtain technical know-how from other sources after consultation with SIEMENS.

As a result of this, the items under licence arrangement with any third party shall not be part of the COMPUTATION BASIS provided no SIEMENS BASIC ENGINEERING AND MANUFACTURING KNOW-HOW, CONTRACT PRODUCT KNOW-HOW, SYSTEMS TECHNOLOGY KNOW-HOW is used for these items.

SIEMENS reserves the right to withhold the further flow of INFORMATION to BHEL for the specific areas if SIEMENS is of the opinion that its interests are seriously affected."

88. The Committee enquired if the original clause was there would it not mean that it would have caused severe strain on BHEL's interest. The Chairman, BHEL replied:

"It is better that it is not there in the agreement."

89. The Committee pointed out that even in the modified clause it had been mentioned that the Siemens reserve its right to withhold further flow of information, i.e., M/s. Siemens would have the last say. The Chairman, BHEL stated:

"this is when we go to another party for collaboration for any item".

90. The Committee enquired about the basis on which royalty would be paid by BHEL. The Director (Engineering) stated "no more royalty will be paid for this area". Asked about the position in regard to lumpsum payment when this clause becomes operative, the Chairman, BHEL stated "as far as documentation is concerned, it would have already come to us".

The Director (Engineering) added: "I do not think we can get back the money for the documentation which they have already supplied to us."

91. The Committee pointed out that the lumpsum payment as per the agreement has to be paid for fifteen years. The Director (Engineering) stated "this type of going to somebody else in these matters is not likely to occur".

92. The Committee pointed out this sort of hypothetical answer would not help the Committee. The witness said "as far the documentation supplied to us, for that, we cannot get any money back from the lumpsum payments made."

**M.—Right of BHEL to sub-licence the rights granted under the agreement to other Indian parties.**

93. In regard to the right of BHEL to sub-licence the rights granted under the proposed agreement to other Indian parties the relevant provision in agreement reads as follows:—

“BHEL shall have the right to sub-licence the rights granted hereunder to other Indian parties with the prior written consent of Siemens which Siemens will not unreasonably withhold; the terms for such sub-licence (a) shall be subject to the approval of Government of India.”

94. During evidence the Committee pointed out that under this clause BHEL stand committed to pay Siemens for sub-licensing. The terms of such sub-licensing means conditions which mean quantum of payment and other restrictive conditions that may follow. The Chairman, BHEL stated that the clause has been modified. Asked as to when it was modified, it was stated that it was modified in the meeting of December, 1978. The modified clause reads as follows:—

“BHEL shall have the right to sub-licence the rights granted herein to other Indian parties with the prior written consent of Siemens which Siemens will not unreasonably withhold; the terms for such sub-licence(s) shall be subject to the approval of Government of India. However, such sub-licensing rights can be granted by BHEL to any undertaking wholly-owned by Government of India, without the prior written consent of Siemens. Siemens shall be notified of the grant of such sub-licensing rights. Any sub-licensing will be without any liability for further lumpsum payment.”

95. The Chairman, BHEL explained “the idea of the modified clause is even if BHEL sub-licenses to a Government organisation, we can sub-licence it without paying any additional lumpsum to the Siemens.”

96. Asked about the question in regard to non-Governmental organisations, the witness stated “this modification is only for the Governmental organisations.”

97. The Committee pointed out that even according to the modified clause Siemens' prior consultation was necessary and only they could decide the reasonability or unreasonability of withholding consent. The Chairman, BHEL stated “it is for parties other than wholly-owned Government companies”.



98. The witness added "This sub-licence can be given without any additional payment. If BHEL does not want to take that responsibility, we can pass on to the State sector or Government sector. That is the object; private sector will be rather difficult."

99. The Committee enquired if BHEL would be required to pay royalty in case of sub-licensing to private manufacturers. The Chairman, BHEL stated "There the terms will have to be negotiated."

#### N.—Grant of rights by BHEL to Siemens

100. As per the draft agreement furnished to the Committee in February, 1979 clause 7 relating to Licences granted by BHEL to Siemens read as follows:—

"BHEL grants to Siemens under BHEL information and under patents of BHEL free of charge:—

(a) for improvements made by BHEL on the items within the Technical Scope a non-transferable, non-exclusive license for Germany;

the right to grant to subsidiaries of Siemens a non-transferable, non-exclusive license of these improvements for their respective home countries;

(b) for the use and sale of such improved items so manufactured a non-transferable, non-exclusive license for all countries, including the right to make this license available to subsidiaries of Siemens;

(c) the right to grant sub-licenses to licensees and licensors of Siemens provided the respective licensee or licensor of Siemens grants to Siemens the right to transfer similar rights to BHEL.

101. During evidence held on 23rd March, 1979 the Committee enquired if Siemens will have access to BHEL's know-how in terms of the agreement. The Chairman, BHEL replied in the affirmative. Asked if it would include the product designs in collaboration with other collaborators, the witness stated:—

"Only what BHEL would be able to develop within the collaboration period."

102. The Committee pointed out that Siemens were being allowed intrusion in product-design for which BHEL engineers are responsible. They enquired if BHEL would receive any royalty. The Chairman, BHEL replied, "they will not be paying any thing." On

3rd April, 1979 BHEL furnished to the Committee a copy of the draft agreement as modified. It was noticed that the relevant Article had been modified. The Article as modified reads as follows:—

“BHEL grants to Siemens under BHEL information and under patents of BHEL, free of charge:

- (a) a non-transferable, non-exclusive license to manufacture in Germany, items within the Technical Scope using improvements made by BHEL;
- (b) a non-transferable, non-exclusive license for use and sale of such improved items so manufactured for all the countries;
- (c) rights to sub-licence the rights granted in this Article to licensees and licensors of Siemens, provided the respective licensees and licensors of Siemens grant to Siemens similar rights for BHEL.

If the improvements referred to in Article 7.1 are of significant value, Siemens will pay reasonable compensation to BHEL. The quantum of such compensation will be mutually agreed upon.”

103. During evidence held on 4th April, 1979 the Committee enquired when the amendment was suggested. The Chairman, BHEL stated:—

“Discussions were held in December (1978) and again in March (1979) and then it was finalised. It was on 31st March”.

104. Asked if it was after the last sitting of the Committee, the witness replied in the affirmative and said, “discussions were on at that time.”

#### O.—Supply of Documents

105. According to the terms of the proposed agreement, Siemens shall furnish to BHEL adequate documentation for implementing the transfer of technology. The quantum of such documentation has been assessed by both parties at the present time at 750,000 pages of various sizes. The annual drawal during this term of agreement is estimated to be about 50,000 pages but would be subject to the requirement of BHEL.

106. As regards additional requirement in 1978, Siemens charge costs at the rate of 16 DM per page documentation. For subsequent years, this rate would be subject to an escalation clause.

107. During evidence, the Chairman, BHEL stated:—

“As per the contract we have to pay a lumpsum and they have to give us a certain fixed amount of documentation. If we want over and above that, there is a charge per sheet. And for that, there is an escalation in subsequent years.”

108. The Committee expressed the doubt that BHEL may not be able to get clarification regarding the interpretation of documentation in view of the wording of Article 2.9 of the draft agreement which read as follows:—

“Upon request by BHEL, Siemens shall endeavour to the best of its efforts to answer in writing to an extent which Siemens deems reasonable, written questions of BHEL relating to the interpretation of the Documentation furnished by Siemens. The clarification so supplied shall not be counted as part of documentation for the purpose of page limit.”

109. The Chairman, BHEL informed the Committee that this clause had slightly been modified. The words “deems reasonable” had been cut out.

#### **P.—Training of BHEL Personnel**

110. Under the terms of the Proposed agreement “Siemens is obliged to train BHEL personnel for a period upto 1800 man-months. Around 180 man-months in total per annum and around to 60 man-month per annum in systems technology during the terms of the agreement”.

111. As regards additional requirement the agreement also provides that “In 1978, Siemens charges training costs at the rate of 7000 DM per man month. For subsequent years, this amount is subject to an escalation Clause.

112. Further in regard to adaption of manufacturing technologies of Siemens to BHEL’s special requirements the agreement stipulates that:

“The BHEL personnel delegated to SIEMENS may, during the training, also consult SIEMENS personnel and discuss the adaptation of manufacturing technologies of

SIEMENS to BHEL's special requirements and the progressive introduction of SIEMENS design features. Such activities of the BHEL personnel shall not exceed 60 man-months per annum".

113. During evidence the Committee enquired what would BHEL do in 3-4 months time it exhausts its quota of consultation. The Director (Engineering) stated:

"This is an estimate we have made on the basis of inputs we need from them for specific requirements and product areas. In case in some area these men month gets exhausted it will be possible for us to adjust it against man months which were available to us in the other areas".

114. Asked if this was provided for in the agreement the witness stated:

"There is a review mechanism proposed for this agreement at the highest level".

He added:

"A Steering Committee at the highest level is planned to review all such matters on a continuous basis. Such problems are to be brought out and sorted out by this Committee".

115. The Committee enquired if the Steering Committee is authorised to modify the terms and conditions of the agreement. The witness stated:

"They have no right to modify the terms of the agreement".

116. Asked if the escalation Clause has been settled, the witness stated "Both training fees per month and also escalation clause has to be settled with them."

117. The Committee enquired how BHEL would be in a position to interpret the escalation clause for subsequent years and how BHEL would safeguard their interest. The Finance Director stated "we have already asked the Siemens for a draft formula for this."

118. Subsequently in a letter dated 11 April, 1979 the Finance Director stated that a letter had been written to siemens on 20th September, 1978 in this regard. The matter was also discussed with representatives of Siemens on 21st March, 1979. The escalation

clause was finalised in a meeting held in Delhi on 31st March, 1979. An escalation formula was also evolved and agreed to.

**Q.—Manufacturing facilities and advertising**

119. Article 15.1 of the draft agreement as furnished to the Committee on 8th February, 1979 states:

“In order to establish a BHEL standard of quality comparable to the standards of Siemens, BHEL shall use its best efforts to provide and maintain adequate design manufacturing and testing facilities. Siemens shall have the right to inspect such facilities.”

120. In the copy of the revised draft agreement as furnished to the Committee on 3rd April, 1979 the last sentence has been omitted.

121. During evidence the Committee enquired if cost of facilities to be provided for adoption for Siemens systems and designs had been quantified. The Chairman, BHEL stated “under the collaboration agreement, if we implement it, the capital investment will be of the order of Rs. 23 crores.”

122. Articles 15.2 & 15.3 of the draft agreement as originally supplied by BHEL to the Committee read as follows:—

“BHEL may mark contract products which are manufactured by BHEL essentially under use of Siemens information with “BHEL in technical collaboration with Siemens”. The form of such inscription shall be agreed upon between the parties hereto.”

BHEL may indicate in all its advertisements and advertising material referring to contract products that contract products which are manufactured by BHEL essentially using Siemens information are made under technical collaboration with Siemens.”

123. The Committee enquired if BHEL would be obliged to advertise or make their products as “in technical collaboration with Siemens. They pointed out the word ‘may’ have the force of “shall”. The Director (Engineering) replied that according to the contract they would not be obliged.

124. Asked about the necessity to keep such a clause the witness stated: “That is for certain export areas”. Asked as to why it was

not specifically stated in the agreement that discretion would absolutely lie in the hands of BHEL, the witness stated "This is a point we will certainly take note of in finalising the agreement."

125. In the revised draft agreement supplied to the Committee on 3rd April, 1979 in both the clauses mentioned above after the word 'may' the words "if it so desires" have been added.

**B.—Delegation of Siemens Personnel to BHEL and Additional Assistance to be rendered by Siemens.**

126. As per terms of the agreement "Siemens is prepared to delegate Siemens personnel to BHEL to assist BHEL in various aspect of this Cooperation. Siemens shall endeavour to the best of its efforts to render such assistance whenever it is required by BHEL".

127. In regard to the additional assistance to be rendered by Siemens the agreement provides "Upon request by BHEL, Siemens shall endeavour to the best of its efforts to render such project engineering services as may be specially requested by BHEL within the Technical scope for what a substantial part of the hard-work is manufactured by BHEL using information obtained under this agreement".

128. During evidence the Committee enquired if the extra cost to be charged for the above services has been qualified. The Chairman, BHEL stated:

"Such clauses are there in other agreements also, where we have to go to the Government of India every time; i.e. whenever we have to get some personnel from our collaborators, we have to go to the Government of India. There are certain yardsticks."

129. The Director (Engineering) however, stated:

"In the KWU agreement, such rates are specified".  
The Chairman, BHEL added:

"It is not specified here. The type of work is so different. The project can be different. It is very difficult to arrive at a specific rate. That is why we have to go to the Government of India every time."

**S.—Limitation of Liability**

130. The relevant par regarding Guarantee in Performance and Maintenance of quality of the "Check List in connection with

**Foreign Collaboration Agreements**" contained in the **Capital Budget Manual of BHEL** reads as follows:

- (a) Performance guarantee bond should clearly indicate the liability of the contractor/collaborator/consultant for unsatisfactory performance and non-fulfilment of the contract in respect of quality, faultless operation, and level of production etc.
- (b) Guarantee clauses relating to the professional competence of technicians deputed as also for the accuracy of documents supplied should provide the right of claiming damages and replacement of the defective supplies.
- (c) In all contracts for supply of equipment, the Indian party should reserve the right to decide finally whether the non-shipment of minor items would be taken into account for determining the date of the last shipment as also the effect of the non-shipment of such items on the erection schedule of the project, the guarantee period for the workmanship guarantees, etc."

131. Article 13 of the Draft Agreement relating to Limitation of Liability, however, reads as follows:—

- 13.1. "Under this AGREEMENT the sole obligation of the parties with respect to INFORMATION shall be exercise due care and diligence in transmitting the INFORMATION with reasonable promptitude and adequate completeness to the other party and to correct any errors in the DOCUMENTATION without delay at its own cost.
- 13.2. Any other warranty whatsoever of the parties is excluded.
- 13.3. The parties declare that the INFORMATION, if properly utilised by the receiving party in every detail with deviations approved as being equally suitable, should produce the same results as obtained by the party furnishing same.

The parties shall have no responsibility for the ability of the other party to use the INFORMATION, or for the quality of the products which are made under such INFORMATION."

132. The Committee enquired how such a clause which states that "the party shall have no responsibility" has been included

when BHEL were required, as per guidelines contained in the Capital Budget Manual to make provision for guarantee in the performance and maintenance of quality. They also enquired if paragraphs in the Capital Budget Manual and the Draft Agreement did not contradict each other. The Director (Engineering) replied, "In my views they don't."

133. In the Draft Agreement as furnished to the Committee on 3rd April, 1979 Clause 13.2 has been deleted.

#### T.—Penalty Clause

134. The procedure to be adopted for entering into foreign Collaboration has been laid down by BHEL in their Capital Budget Manual. In regard to penalty Clause the following procedure is required to the adopted—

"A clause for recovery of liquidated damages should be included (in addition of the right to terminate the agreement) in case of delay in execution or unsatisfactory performance and also a right to postpone the payment of every instalment in such a situation should be secured. It may also be desirable in many cases to have a performance guarantee bond being directly enforceable by the enterprise. With regard to the functioning of the equipment and the like. In cases of delay in execution, it would be necessary for the enterprise to make a genuine pre-estimate of the damages likely to be suffered due to the delay and the like, and to make a provision for liquidated damages on that basis.

(b) Where possible a penalty clause for non-adherence to the committed delivery schedules of equipments, components, materials, designs specifications, know-how, etc. should be provided. ..

135. The proposed draft agreement however does not contain any penalty clause.

136. During evidence the Committee enquired how BHEL would be in a position to safeguard their interests if Siemens fail to do their part. The Chairman, BHEL stated: "every quarter, there will be a review meeting". Asked why penalty clause was not included in the agreement as per guidelines laid down in the Capital Budget Manual, the witness stated "The penalty Clause, "I am told, is normally purchase of equipment."



**ARBITRATION**

137. The Arbitration Clause on the draft agreement as follows:—

“If any dispute shall arise concerning the interpretation or the performance of any provision of this Agreement or any question relating thereto, including any questions as to whether this Agreement has been properly terminated by either party, as to which the parties—even after appeal to the STEERING COMMITTEE—cannot agree, such dispute shall be submitted to and settled by arbitration.

Said arbitration shall be effected in accordance with the arbitration rules of the Indo-German Chamber of Commerce.

It is expressly agreed that the dispute shall be submitted to three arbitrators, each of the parties nominating one and the third arbitrator being nominated by the two so nominated or, if they cannot agree on a third within one month after the nomination of the two arbitrators, by the Indo-German Chamber of Commerce.

In the event that either party, within one month of any notification made to it of the demand for arbitration by the other party, shall not have nominated its arbitrator, such arbitrator shall be nominated by the Indo-German Chamber of Commerce.

The meeting of the arbitrators shall be held in Bombay India, such times as may, be agreed upon by a majority of the arbitrators or as otherwise may be agreed upon by the arbitrators.

The laws of INDIA shall be applicable for the construction and interpretation of this AGREEMENT.”

138. The Committee pointed out that according to the Capital Budget Manual it has to be indicated in the agreement that the Arbitration Act, 1940 shall apply.

139. They enquired if the Director (Engineering) has seen this earlier. The Director (Engineering) replied in the negative. He stated:

“as long as the laws of India apply, we are completely covered.”  
The Committee pointed out that in case of disputes it will

be governed by the rules of Indo-German Chamber of Commerce. The witness replied: "but under the laws of India."

140. During evidence the representatives of Ministry of Industry the Committee pointed out the BHEL had two choice—either the Indian Arbitration Act or International Chamber of Commerce. They enquired why BHEL chose to substitute this by Indo-German Chamber of Commerce. The Finance Advisor stated: "The Indo-German Chamber of Commerce would be more advantageous to us, from our point of view."

141. In a note (given in Appendix) submitted to the Committee Ministry of Industry have *inter alia* stated:

"In the present case the latest operating guidelines on foreign collaboration are those contained in O.M. No. GL/012/BPE/MM dated the 9th May, 1977 issued by the Bureau of Public Enterprises and the relevant provisions regarding arbitration are as follows:—

The Indian Arbitration Act is definitive and it should normally be possible to include the provision of arbitration in the Collaboration agreement in conformity with the Indian Arbitration Act, 1940. However, in cases of collaboration agreements for sophisticated technology where collaboration may be few, the arbitration may have to be under the rules and regulations under the International Chamber of Commerce, if so insisted upon. Even in such cases the venue for arbitration should as far as possible be India. The number of arbitrators, umpires and their nationality should be indicated.

The feasibility of making suitable provision in the agreement by which technology disputes should be resolved during the subsistence of the agreement should also be considered and the need for legal arbitration or judicial settlement which are fairly long drawn out processes involving uncertain liabilities ought to be minimised."

142. The unusual features of the proposed collaboration with Siemens as emerging out of the draft agreement drawn up first is summed up below.

The transfer of technology will be mainly through documentation consisting of 7,50,000 pages and training of BHEL personnel upto 1800 man months. Additional documentation or training that may

be required was to be paid for extra subject to an escalation, the formula of which was not specified. Clarification relating to the interpretation of the documentation supplied by Siemens could be obtained only to the extent they and they only considered it reasonable. There was also restriction on discussions on adaptation of technology by the officers under training with Siemens, who will have no responsibility whatsoever in regard to the results obtained as a result of this collaboration which would depend entirely on the ability of the BHEL. In fact surprisingly there is no penalty clause in the draft agreement.

143. Whereas BHEL will pay for the know how of Siemens, Siemens will have access to the BHEL know-how free of charge. This is fantastic. If BHEL entered into a collaboration with a third party such agreement will have to take into account the objectives and interests of Siemens which obviously would include their subsidiaries in India. A clever attempt to avoid competition between BHEL and Siemens subsidiaries in India is thus evident. BHEL would not be in a position to sub-license their rights obtained without making further payment to Siemens. This free horizontal transfer of technology in India was not possible. It looked as if BHEL was under obligation to mark the contract products as in technical collaboration with Siemens thereby giving publicity to the collaborator at our cost. The export rights of the BHEL would be restricted. This is not all. BHEL would be informing Siemens the details of all quotations that it might give for exports thereby compromising on secrecy. In the case of disputes the arbitration would be in accordance with the rules of India-German Chamber of Commerce who would have a large say in the matter of appointment of arbitration.

144. The terms of the draft agreement have violated the guidelines issued by Government in regard to not only the period of agreement but also the guarantee, arbitration and penalty clauses in particular. To justify this violation on the basis of the proposal being unique is not quite acceptable. This was all the more reason why the proposal warranted a close scrutiny not only by Government but also by a Parliamentary Committee. Since the Committee took up the examination of the proposal some changes have been made in the draft agreement on further negotiations with Siemens. However, as has been clearly brought out in this Section of the Report the unusual features heavily weighted in favour of Siemens largely remain intact.

145. In view of the foregoing the Committee wish to emphasise that there is an urgent need for sincere efforts on the part of the BHEL to become self-reliant as speedily as possible. In this context the R&D expenditure would require to be stepped up in a big way

so as to be in line with large power equipment manufacturers in the world. In the meantime should it be considered absolutely necessary to go in for any further collaboration a global enquiry should be sent out and a High Powered Technical Body unconnected with the proposed broad-based collaboration with Siemens should be constituted to dispassionately go into the actual and immediate need of such collaboration, the minimum area in which it should be obtained and the scope, whether it should be for the Systems or Products. The endeavour should be to get the best possible terms for such a collaboration and there should be no tie-up with one particular organisation and that too for a long time.

## CHAPTER II

### Turnkey contract for a power station in Tripoli West, Libya

146. BHEL has been awarded overseas turnkey contract for a power station in Tripoli West, Libya for complete engineering, manufacture, supply, erection and commission of a 2x120 MW oil-fired thermal power station as an extension to the existing power station there. For civil works BHEL awarded a sub-contract to M/s. Gammon India Ltd.

147. The Committee desired to know the value of the contract and the actual cost. The BHEL stated in a note submitted to the Committee as follows:—

“The main project will be completed in 1979. BHEL’s responsibility towards operation and maintenance will continue to be discharged till 1983. Hence the final position will emerge only in 1983. However, according to the present indications the total expenses on the project will be Rs. 117.50 crores as per details given below as against an expected revenue accrual of Rs. 112 crores.

---

	(Rs. in Crores)
Equipment (BHEL & non-BHEL) . . . . .	48.00
Ocean freight, local transport at Libya, handling and insurance . . . . .	5.30
Project management at site, at Delhi, project engineering expenses, erection charges and other expenses . . . . .	21.00
Civil works including preliminaries and replacement . . . . .	40.70
Operation and maintenance . . . . .	2.50
	<hr/> 117.50S

---

The contract gives a lumpsum price. This has been broken up in two parts, i.e. services rendered in Libya, which is paid in local currency, and supplies of equipment from India and third countries, which is being paid in convertible currency. For the sake of easy and quick realisation of maximum amount against this contract the supply portion was appropriately loaded. The payments against supply portion are being made by opening Letters of Credit

which is much quicker and gives BHEL investible currency with no problem of repatriation. Local portion has been kept at the minimum since payment of this involves lot of procedures such as agreement of customer and the Consultant on the progress of the work at site. In view of the above, it is not feasible to co-relate by individual items of the contracted break-up with the estimated cost.

The cost over-run is primarily in the area of civil works. The opportunity for undertaking the work came to notice towards the end of August, 1975. A team was sent from India to Libya in September, 1975. In the limited time available, it was not possible for the team to undertake in-depth engineering investigation or undertake any detailed physical survey of the Site conditions. However, the team collected as much information as possible regarding site conditions, prevailing market rates of materials, available facilities, etc. by contacting construction and other agencies operating there, authorities of the existing Tripoli Power Station and Indian engineers on deputation with the Libyan Government. When the detailed engineering was undertaken, some new aspects came to light and large variations in the quantities became unavoidable.

148. In regard to the award of contract to M/s. Gammons India Ltd. the following is the position as stated by the BHEL:

"M/s. Gammons India Ltd. were the second lowest and the lowest tenderer was M/s. Essar Construction & Carriers Limited. The latter had not constructed the Civil works for any power station or comparable industrial projects in the country and had no experience in the construction of civil works outside the country. M/s. Gammon India Ltd. on the other hand, had considerable experience in the construction of civil works for power station and had also experience of construction outside the country. At the time of signing of the main contract, the consultants and the clients had also indicated their preference for the appointment of M/s. Gammon India as a civil sub-contractor. After due consideration of the technical competence and organisational capacity of M/s. Gammon India and the client's preference it was decided to award the work to them."

149. The Internal Audit examined the site accounts as also the contract documents. Their main observations were about awarding

the contract for the civil engineering works. It was observed that proper survey and estimation of the quantities was not done before awarding the contract which might lead to a cost over-run on the project.

150. During evidence, the Chairman BHEL *inter alia* stated as follows:

"It is true that our cost expectations have gone a little awry because we thought it could be done within Rs. 97 crores. Now it is going upto Rs. 112 crores. I must say that this excess is in the Civil Works. There has been an excess of Rs. 23 crores. At the time of tendering it was about Rs. 17 crores and odd now it has come to Rs. 40 crores. This is too big a cost. We were really worried as to how such a thing happened."

He further added:

"the quantities that go into the Civil Works have gone up and the basic reason for that is that the proposals were made out with a certain lay out. In the turn key project there was no plan, there was no specification as to what should be structures that are required and what should be the length of the cooling system. This is a turn key project for commissioning and erecting if with such and such facilities. But, what these facilities are to be and what are the requirements therein, was left to us to estimate within limited experience in turnkey projects we may prepare a drawing here which is more or less in line with what we will do in our country. Over and above what was designed by us, the foreign consultants felt that turbine structure had to be a little longer and certain other facilities, the design and lay-out and the cooling water system had to be considerably changed. That is the basic reason why the quantities had exceeded."

151. In a note submitted to the Committee, BHEL have stated as follows:—

"It is a fact that the earth work quantities went up from 25,000 cubic metres to 1.25 lakh cubic metres in respect of the cooling water system. In respect of the structural steel also the quantities went up from 423.5 metric tons to about 2400 metric tons."

152. During evidence the Committee enquired if the assessment made earlier was genuinely unexpected. The Chairman, BHEL stated that "it is a genuinely unexpected assessment. The lay-out prepared was wrong". The witness added, "This extra expenditure incurred on this extra quantity of earth-work cannot be attributed to the failure on the part of Libyan Government. But it was some sort of misinterpretation of a clause in the tender scheduled by us. This was as a result of that."

153. The Committee enquired if the site had been inspected before giving the tender. The Chairman, BHEL stated that the site had been inspected by a team of officers, including civil engineers, design people and markets people. The witness further stated as follows:—

"They made the estimates based on a lay-out which, they thought, was satisfactory. Even other firms like Japanese also adopted a similar lay-out. Our people had adopted the size of turbine house and other facilities more or less on the same basis as we had in India. But the consultants whom Libya had engaged wanted more elaborate arrangements. Since it was a lumpsum contract, we had no other choice but to carry out their directives."

154. Asked if BHEL had carried out any survey of the site. The witness stated "No survey of the site appears to have been carried out".

155. The Committee enquired if BHEL had conducted the enquiry to fix responsibility. The Chairman, BHEL stated:—

"Whether there could have been any improvement in making out the lay-out ever in the very beginning, we are enquiring into."

156. The Committee enquired as to why no formal enquiry has been made so far and why no action had been taken against persons responsible for such a huge loss. The Chairman, BHEL stated:—

"Now that you have raised the question, I shall see that a contingent of very senior civil engineers not associated with the BHEL will be asked to go to Libya, to look into as to how such a situation could have been avoided."

157. A typical case of lack of care or worse which would cost BHEL heavily far from yielding any profit is that of a power station construction undertaken on turnkey basis in Libya. The con-



tract was for a lumpsum but BHEL had given a sub-contract for civil works to Gammon India on an item rate basis. The tender amount for the civil work was Rs. 17 crores which now has turned out to be actually Rs. 40 crores. This was due to gross under-estimation of the earth work and structural steel requirements. The earth work for cooling water system which was estimated to be 25,000 cubic metres went upto 1.25 lakhs cubic metres i.e., five times. The quantity of structural steel went up from 424 tonnes to about 2400 tonnes i.e. about six times. That the incredible increase in earth work arose out of misinterpretation of a clause in the tender schedule by the BHEL is indeed deplorable. What was worse was that no survey of the site had been carried out before tendering for the work nor has the BHEL been clear about the size of the various structures to be built by them. As this utter bungling resulted in an extra payment of the order of Rs. 23 crores and on the whole the turn-key project would end up in a loss to the BHEL. the Committee require that the results of the inquiry promised to be made by the Chairman, BHEL before the Committee and the action taken on the basis thereof should be intimated to them within three months.

NEW DELHI;  
 April 27, 1979.  
 Vaisakha 7, 1901 (S).

JYOTIRMOY BOSU,  
 Chairman,  
 Committee on Public Undertakings.

## APPENDIX I

(Vide Paragraph 141 of the Report)

*Note furnished by the Ministry of Industry regarding Arbitration clause in the proposed agreement between BHEL and Siemens.*

During the examination of witnesses by the Committee on Public Undertakings on 9th April, 1979, the Committee desired to have a written note in respect of the arbitration clause in the agreement in the context of the capital budget manual issued by BHEL and the guidelines issued by the Bureau of Public Enterprises Clarification was sought in particular as to how the proposed arbitration clause and arbitration under the rules of the Indo-German Chamber of Commerce fall within the scope of the guidelines.

2. At the outset, it is necessary to clarify the distinction between "guidelines" and "directives". It is understood that such a clarification was furnished by the Ministry of Steel and Mines (Department of Mines) in their O.M. No. 54012(1)/76-Met. II dated 21-12-1976 in answer to recommendation Sl. No. 99 contained in the 88th Report of the Committee on Public Undertakings. The reply of the Government was as follows:

"The above recommendation of the Committee was considered by the Bureau of Public Enterprises and their reply is reproduced below:

"It is necessary to clarify in this context the distinction between "Guidelines" and "Directives". The Central Public Sector in India operating under a corporate form of management consists of statutory corporations and companies registered under the Companies Act. Over a period of years a preference for the company form as distinct from the statutory corporation has emerged as the former provides greater flexibility. In either case, the Central Government, i.e., the Administrative Ministry has the powers to issue "Directives" to the Corporation or Company by following the prescribed procedure in the Statute and Regulations framed thereunder, or the Articles of Association as the case may be. It would be significant to note that such "Directives" have been few confin-

ed mostly to issue of policy such as employment of Scheduled Castes/Tribes, employment of ex-servicemen and dependents of those killed in action. The "directives" therefore, constitute mandatory instructions issued specifically to each company or corporation.

On the other hand, the Bureau of Public Enterprises as a co-ordinating agency of the Government has been relaying general instructions in the shape of guidelines to different enterprises. The guidelines issued by the Bureau of Public Enterprises arise out of decisions taken by the Government which have a general applicability and which are relevant to the Central Public Sector. Sometimes, such decisions are based on the recommendations of Administrative Reforms Commission, Committees of Parliament, including the Committee on Public Undertakings and such other bodies.

The issue of instructions in the form of guidelines offers some amount of flexibility, in that while the basic principle contained in certain guidelines would have general applicability and compliance there with would be mandatory, the applicability of the rest of the guidelines would be on a *mutatis mutandis* basis. The point mentioned above can be illustrated better with reference to the guidelines on settlement of disputes between one Government Department and another and one Government Department and a Public Enterprise and one Public Enterprise and another contained in O.M. No. BPE/GL-001/76/MAN/2(110)/75BPE(GM-1) dated 1-1-1976. The basic decision contained in the circular is that all disputes should be resolved amicable by mutual consultation or through empowered agencies of the Government or through arbitration and recourse to litigation should be eliminated. The basic decision has to be complied with by each enterprise. Nevertheless, the actual procedure for implementation would vary from enterprise to enterprise depending upon the situation. In such cases, it is preferable to issue guidelines rather than directives to enterprise. Also issue of directives on an individual basis is a lengthy process.

As explained above, compliance with guidelines has to be examined with reference to the situation. Knowing the background in which guidelines are issued, it is for each enterprise to study every guideline and determine with reference to the prevailing situation, which elements thereof are to be complied with and where necessary seek clarifications from the administrative Ministry or the Bureau of Public Enterprises."

In the present case, the latest operating guidelines on foreign collaboration are those contained in O.M. No. GL/012/BPE/MM

dated the 9th May, 1977 issued by the Bureau of Public Enterprises and the relevant provisions regarding arbitration are as follows:

"The Indian Arbitration Act is definitive and it should normally be possible to include the provision of arbitration in the collaboration agreement in conformity with the Indian Arbitration Act, 1940. However, in cases of collaboration agreements for sophisticated technology where collaborators may be few, the arbitration may have to be under the rules and regulations under the International Chamber of Commerce, if so insisted upon. Even in such cases the venue for arbitration should as far as possible be India. The number of arbitrators, umpires and their nationality should be indicated.

The feasibility of making suitable provision in the agreement by which technology disputes should be resolved during the subsistence of the agreement should also be considered and the need for legal arbitration or judicial settlements which are fairly long drawn out processes involving uncertain liabilities ought to be minimised."

The Secretary, Department of Expenditure, Ministry of Finance made the following statement to the Committee on Public Undertakings when they examined the general question of foreign collaboration in public undertakings:—

"If I may submit, there are three aspects the law of the contract, arbitral forum and the law of arbitration. It could be to our advantage if all contracts entered into by all companies in India—public or private, were under the laws of India, if arbitration were to be under the Indian Arbitration Act and the forum were to be an Indian arbitration forum. This reduces our costs, makes our position and our knowledge of the law firm. That is, therefore, our bargaining position in respect of literally thousands of contract that the private sector are entering into with respect to collaboration agreements; that is what the guideline is. However, in all major negotiations the other party would obviously prefer exactly the opposite. An American party would naturally prefer the laws of New York, the arbitral forum to be New York. So in the major contracts it is a matter of negotiations and our guidelines are, therefore, flexible. We start with the position that we are a Sovereign government; we are negotiating with parties all over the world and they should if they want to invest in India accept our framework of laws which are well-known and well-established; about their fairness there should be no doubt. However,

in the real world of bargaining, it is necessary that we should be prepared to yield to a certain extent on international arbitration forum, law of arbitration or even law of contract. We are not prepared to accept contracts and arbitration under legal systems which are strange to us. Therefore, as Secretary, Ministry of Petroleum had stated, the guidelines should be there; it should be flexible; where major contracts are negotiated and they cannot be finalised under those terms, we should be prepared to relax them." (The above text has been reproduced from the Eighty-ninth Report of the Committee on Public Undertakings).

5. The attached statements shows the comparative position in regard to arbitration under the rules of the Indo-German Chamber of Commerce and those of the International Chamber of Commerce.

6. It may be seen there from that arbitration under the Indo-German Chamber of Commerce would, by and large, meet the stipulations made by Government in the guidelines issued on arbitration, and as the venue of arbitration is in Bombay in India, Indian Law would apply including the Indian Arbitration Act.

## International Chamber of Commerce

## Indo-German Chamber of Commerce

## No. and brief particulars

1. Panel of Arbitrators/Umpires The arbitration court shall consist of two arbitrators and an Umpire. The names of arbitrators are contained in two panels, panel (i) consisting of names of Indian nationals; panel (ii) consisting of German Nationals and as the case may be other non-Indian nationals of German or foreign origin. Panel (iii) will contain the names of Umpires with Indian, German or third nationalities. (Rule 3).
2. Appointment of Arbitrators. Both parties will nominate one Arbitrator each to be chosen by the respective parties from either of the panel of Arbitrators. (Rule 5).
3. Appointment of Umpires/third Arbitrators. The Arbitrators appointed by the parties shall select an Umpire from the panel of Umpires and on their failures to do so, they shall report the same to the Registrar. Within 7 days of such report being received, the Committee shall appoint the Umpire from the Panel of Umpires.
4. Pronouncement of awards. The Arbitrator shall make an award in writing or notify the disagreement to the Registrar and if the Arbitrators fail to make an award with the specified period, the Registrar shall forthwith call upon the Umpire to enter upon the reference and the Umpire shall thereupon proceed with the reference. (Rule 10).
5. Place of Arbitration. The arbitration will be held in Bombay. (Rule 11).
6. Arbitration procedure. Arbitration court will decide all the procedures to be followed at its own discretion with due regard to the rules of natural justice (Rule 8).
- The parties may by agreement nominate the sole arbitrator and forward his name for confirmation by the court of arbitration. Article 2(3) where the reference is to three arbitrators each party shall nominate one arbitrator and forward his name for confirmation by the court of arbitration. [Article 2(4)].
- When three Arbitrators have been appointed, the award is given by a majority decision. If there be no majority the award shall be made by the Chairman of the arbitral tribunal alone (Article 19).
- The place of arbitration shall be fixed by the court unless agreed upon by the parties (Article 12).
- Rules governing the procedure shall be those resulting from these rules and where the rules are silent, any rules which the parties (or failing them the Arbitrator may settle. (Article 11).

## APPENDIX II

### *Summary of Conclusions/Recommendations of the Committee on Public Undertakings contained in the Report.*

S. No.	Reference to page No. in the Report	Summary of Conclusions  Recommendations
(1)	(2)	(3)
1	48	<p>There has been a public debate on the proposed broad-based long term collaboration agreement between BHEL and Siemens of West Germany—a multi-national company represented in 450 cities in 120 countries. The matter had also figured in the discussions in both Houses of Parliament. A Systems Collaboration of the kind proposed covering as it does a wide area and time span, is admittedly without a parallel. Further according to the existing guidelines issued by Government on the basis of earlier recommendations of the Committee, period of collaboration where necessary has to be less than 5 years rather than more and that even in the case of existing collaborations any extension beyond a period of eight years has to be brought to the notice of Parliament. For these reasons the Committee's examination of this proposal was required and valid.</p>
2	49	<p>BHEL has by now a long experience in the field of power equipment industry. They had already entered into a number of collaboration agreements, which are currently 23. Of these, 4 are with Siemens of West Germany and their fully owned subsidiary KWU. The Committee have been informed by responsible persons who appeared before them that on the top of all this the proposal for entering into a broad-based long term collaboration with Siemens would be detri-</p>

(1)

(2)

(3)

---

mental to the research and development activities and would run counter to the declared objective of the first Corporate Plan (1974) of the BHEL of reducing dependence on foreign technology. It has also been stated that indiscriminate collaboration covering such a wide range was not justified as it was not all need-based. Admittedly, Siemens are not the best in many products covered by the technical scope of the proposed collaboration.

3

50

The Committee find that no inquiries were made from other leading power equipment manufacturers in the world and that the proposal was negotiated with Siemens only. Ironically, the existing collaboration with this multinational and its subsidiary has been put forward as a justification for broad-basing it. It has been argued that certain gaps in knowledge could not be bridged within an acceptable time frame. The Committee received an impression that the existence of a number of collaborations has perhaps affected their urge to become wholly self-reliant. The remedy proposed will therefore be worse than the disease.

4

51

Though the draft agreement says that the arrangement will be for the mutual advantage of BHEL and Siemens it appears that Siemens will be a far greater gainer. In fact this has been neatly put by BHEL itself as brought out in Paragraph 38 of this Report. This is perhaps the reason why all kinds of indirect coercion to perpetuate the tie-up has been sought to be brought into the agreement. The agreement will be for a period of 15 years subject to an extension by another 10 years. However, if a decision is not taken to extend it by the 12th year information flow to BHEL on new developments will cease. A prolonged tie-up of this kind with a multi-national having local subsidiaries is bound

---



(1)

(2)

(3)

to result in consolidation of the subsidiaries and transfer of economic surplus from a country in a cheap labour situation like India not to speak of exploitation of natural resources.

5

142

to

144

The unusual features of the proposed collaboration with Siemens as emerging out of the draft agreement drawn up first is summed up below.

The transfer of technology will be mainly through documentation consisting of 7,50,000 pages and training of BHEL personnel upto 1800 man months. Additional documentation or training that may be required was to be paid for extra subject to an escalation, the formula of which was not specified. Clarification relating to the interpretation of the documentation supplied by Siemens could be obtained only to the extent they and they only considered it reasonable. There was also restriction on discussions on adaptation of technology by the officers under training with Siemens, who will have no responsibility whatsoever in regard to the results obtained as a result of this collaboration which would depend entirely on the ability of the BHEL. In fact surprisingly there is no penalty clause in the draft agreement.

Whereas BHEL will pay for the know how of Siemens, Siemens will have access to the BHEL know-how free of charge. This is fantastic. If BHEL entered into a collaboration with a third party such agreement will have to take into account the objectives and interests of Siemens which obviously would include their subsidiaries in India. A clever attempt to avoid competition between BHEL and Siemens subsidiaries in India is thus evident. BHEL would not be in a position to sub-license their rights obtained without making further payment to Siemens. This free horizontal transfer of technology in India was

(1)

(2)

(3)

not possible. It looked as if BHEL was under obligation to mark the contract products as in technical collaboration with Siemens thereby giving publicity to the collaborator at our cost. The export rights of the BHEL would be restricted. This is not all. BHEL would be informing Siemens the details of all quotations that it might give for exports thereby compromising on secrecy. In the case of disputes the arbitration would be in accordance with the rules of Indo-German Chamber of Commerce who would have a large say in the matter of appointment of arbitration.

The terms of the draft agreement have violated the guidelines issued by Government in regard to not only the period of agreement but also the guarantee, arbitration and penalty clauses in particular. To justify this violation on the basis of the proposal being unique is not quite acceptable. This was all the more reason why the proposal warranted a close scrutiny not only by Government but also by a Parliamentary Committee. Since the Committee took up the examination of the proposal some changes have been made in the draft agreement on further negotiations with Siemens. However, as has been clearly brought out in this Section of the Report the unusual features heavily weighted in favour of Siemens largely remain intact.

6

145

In view of the foregoing the Committee wish to emphasise that there is an urgent need for sincere efforts on the part of the BHEL to become self-reliant as speedily as possible. In this context the R & D expenditure would require to be stepped up in a big way so as to be

(1)

(2)

(3)

in line with large power equipment manufacturers in the world. In the meantime should it be considered absolutely necessary to go in for any further collaboration a global enquiry should be sent out and a High Powered Technical Body unconnected with the proposed broad-based collaboration with Siemens should be constituted to dispassionately go into the actual and immediate need of such collaboration, the minimum area in which it should be obtained and the scope, whether it should be for the Systems or Products. The endeavour should be to get the best possible terms for such a collaboration and there should be no tie-up with one particular organisation and that too for a long time.

7

157

A typical case of lack of care or worse which would cost BHEL heavily far from yielding any profit is that of a power station construction undertaken on turnkey basis in Libya. The contract was for a lump-sum but BHEL had given a sub-contract for civil works to Gammon India on an item rate basis. The tender amount for the civil work was Rs. 17 crores which now has turned out to be actually Rs. 40 crores. This was due to gross under-estimation of the earth work and structural steel requirements. The earth work for cooling water system which was estimated to be 25,000 cubic metres went upto 1.25 lakhs cubic metres, i.e., five times. The quantity of structural steel went up from 424 tonnes to about 2400 tonnes, i.e., about six times. That the incredible increase in earth work arose out of a misinterpretation of a clause in the tender schedule by the BHEL is indeed deplorable. What was worse was that no survey of the site had been carried out before tendering for the work nor has the BHEL been clear about the size of the various structures to be built by them. As this utter bungling resulted in an extra payment of the order of Rs. 23 crores and on the whole the turn-

(1)

(2)

(3)

---

key project would end up in a loss to the BHEL, the Committee require that the results of the inquiry promised to be made by the Chairman, BHEL before the Committee and the action taken on the basis thereof should be intimated to them within three months.

---

NEW DELHI;  
April 27, 1979.  
Vaisakha 7, 1901 (S).

JYOTIRMOY BOSU,  
Chairman,  
Committee on Public Undertakings.

© 1979 BY LOK SABHA SECRETARIAT

PUBLISHED UNDER RULE 382 OF THE RULES OF PROCEDURE AND CONDUCT  
OF BUSINESS IN LOK SABHA (SIXTH EDITION) AND PRINTED BY THE  
GENERAL MANAGER, GOVERNMENT OF INDIA PRESS,  
MINTO ROAD, NEW DELHI.

Committee on Public Undertakings (1978-79)  
 (Sixth Lok Sabha). Fiftieth Report on  
 Bharat Heavy Electricals Ltd. (Ministry of  
 Industry)

CORRIGENDA

<u>Para</u>	<u>Page</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
41	12	2	but	buy
	12	6	estato	established
	12	6	add 'to' before the word 'avoid'	
	12	7	word 'blished' is to be deleted	
131	33	22	Add the word 'to' before 'exercise'	
134	34	21	After the word 'enterprise' place ' , ' instead of ' . '	
137	<del>35</del>	24	Delete ' , '	
141	36	28	inaicated	indicated
144	37	31	beifg	being
147	40	1	convestible	convertible
147	40	21	aspts	aspects
157	43	10	misinterprcta- tion	misinterpretation
Appendix I				
Appendix I	48	2	delete 'it' after 'two'	
		3	arbitrators	arbitrator