Sida Evaluation 96/48

The Planta Nicaragua Rehabilitation Programme

Consulting Services

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Department for Infrastructure and Economic Cooperation

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Sida Evaluation 96/48
Commissioned by Sida, Department for Infrastructure and Economic Development

Registration No.:INEC 1995-1003
Date of Final Report: June 1996
Printed in Stockholm, Sweden, 1996
ISBN 91 586 7441 1
ISSN 1401-0402

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EVALUATION OF CONSULTING SERVICES WITHIN
THE PLANTA NICARAGUA REHABILITATION PROGRAMME
MANAGUA, NICARAGUA JUNE 1996

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1. INTRODUCTION

The phases 3.1-3.3 of the Sida support to the Planta Nicaragua evaluation programme have been subject to a technical evaluation and phases 3.2 and 3.3 of the same programme to a financial audit which is further defined in the terms of reference under Appendix 1. Also, it should be noted that only the consultancy parts of the phases were subject to evaluation and audit.

Phase 3.1, from September 1992 until June 1993, consisted of technical support to examine the turbo generator and auxiliary systems of unit 1. The phase is complete and reported.

Phase 3.2, from September 1993 until October 1995, consisted of a technical study of the excitation system for units 1 and 2, a study of efficiency and environmental improvements for the entire power plant and a number of training courses for the plant staff. The phase is completed and reported.

Phase 3.3 started in May 1995 and is still in execution. Technical support for the procurement of the contractor for the overhaul of unit 1 turbo generator is completed, as are two minor courses. All other activities are either presently going on, or not yet started.

Thus, only phases 3.1 and 3.2 can be formally evaluated and audited. Phase 3.3 can be commented upon but no results are yet available.

For a more detailed description of the background we refer to the terms of reference in Appendix 1.

2. RESPONSIBILITY

The technical evaluation has been performed by a representative from Galaxicon AB, see further appendix 2, whereas the financial audit has been carried out by representatives from Price Waterhouse KB, see further under appendix 3. No joint responsibility is taken for the other representatives work unless specifically so indicated. The executive summary, section 3 summarises, the conclusions from both the technical evaluation and the financial audit under separate heading.

3. EXECUTIVE SUMMARY

3.1 Summary conclusions

Technical evaluation

The discussion points and issues noted arose from information obtained through interviews with management, technical and operating staff at ENEL's head quarter and Planta Nicaragua power station.

In general terms, the evaluation leads to the following main conclusions:

- The consultancy support to Planta Nicaragua has to a large extent been relevant and useful. The consultant has done a good job with ample documentation.

- The majority of the courses have, although well prepared and carried out, been too general and not really appropriate to ENEL's needs. More emphasis should have been put on "training of trainers" and/or training of specialists.

- The computerised maintenance management system is not fully accepted by ENEL. It should be assessed, taking ENEL's requirements into full account, and compared with other similar systems that are in use in the region, before any further expenditures on it.

Some of the issues are further discussed in section 3.2 and in Appendix 2.

Financial audit

The discussion points and issues noted are based on information obtained through interviews and discussions with accounting staff and project management at the consultant's premises in Malmö, project management and accounting staff at ENEL, the internal auditor at ENEL and through sample testing of accounting documentation.

The conclusion is that

- the contractual terms have in general been adhered to
- in order to avoid misinterpretations the contracts should be more specific and detailed.
- in general terms the controls and accounting routines to the extent reviewed are good at both ÅF and ENEL
- the expenses charged are on the upper end and do in some cases exceed what is commonly regarded as being Sida's intentions. However, what Sida's intentions are may in some cases in respect of reimbursable expenses not be very clear.
- the treatment of the grants at ENEL should be clarified

Some of the above issues and other matters of interest are further discussed in section 3.3 and in Appendix 3.

3.2 Technical evaluation

The consulting services can be divided into three general categories. Procurement/supervision support regarding specific rehabilitation tasks, Training of Planta Nicaragua personnel and General support regarding power plant management/improvements.

It is quite clear that the support regarding specific rehabilitation tasks has been successful. This is also an area in which the Swedish consultant has a long experience and a well known competence, and in which the specific development co-operation requirements and language/cultural understanding are not critical. The tasks have been easy to identify and the consultant has provided valuable services to ENEL.

The training programme is more mixed in its results. Again, when the training has been technically very specific, e.g. the electronic component maintenance course, then the result has obviously been a clear improvement of the plant staff abilities and most of the trained persons are using their acquired knowledge on an almost daily basis.

The other courses have not been quite as useful. They were sufficiently well prepared and carried out by the consultant, and the instructors have been technically fully competent, but the course objectives have not been quite appropriate. The contents have been too general and the courses have not left a very visible mark on the plant staff. ENEL has its own training and capacitation programme, which covers specific items in more depth than the Swedish courses.

An important observation is the fact that the courses unfortunately did not specifically aim at "training the trainers" nor did they aim at providing specialised knowledge to key personnel. The courses did in fact do the opposite, i.e. train everybody at a fairly broad and low level. ENEL's competence and experiences were not fully considered when the courses were defined. This is surprising, as the Assessment of training needs at Planta Nicaragua, carried out by Mr Nils-Olof Körner of SwedPower in 1992, specifically recommended specialised training, adjustment to individual training needs as well as training of instructors!

It can be argued that the consultant provided what it was asked to provide in terms of training, and this is of course true. ENEL, but also Sida, should have paid more attention to define the actual needs for training. The contract was written between Sida and the consultant, without ENEL as a party. ENEL claims that this adversely affected the co-operation and led to a lesser result of the efforts. From phase 3.3, the contracts are written directly between ENEL and the consultant.

A specific problem is the computerised maintenance management system. This was introduced as part of the first maintenance management course in phase 3.2 and continues as one of the main tasks of phase 3.3. There are complaints about this system from the Planta Nicaragua staff and it is not yet functional despite several years of work. It seems that ENEL's requirements for such a system are not fully met, nor has ENEL been provided with sufficient training and manuals.

The activity is still going on, it is therefore a bit premature to draw too far-reaching conclusions at this stage. It is strongly recommended, however, that ENEL defines its requirements and compares them with the system provided by the Swedish consultant and with other similar systems that are used in the region. The need for a computerised maintenance management system is quite clear, but the chosen system and/or the way to implement it may not be the most appropriate.

The efficiency/environment studies are also still going on. The previous reports on these subjects have been well appreciated by ENEL, and also been used in different ways. The full implementation of the recommendations depends on factors outside the consultancy services.

3.3 Financial audit

3.3.1 The contracts which Sida either enters into or approves should be more specific

The contract related to phase 3.2 was entered into by Sida and ÅF whereas the contract related to phase 3.3 was entered into by ENEL and ÅF under the supervision and approval by Sida. In both cases there are references made to Sida's General Conditions for Consulting Services. These do, however, point out that the conditions are to be used unless something else has been agreed upon in the main contract. Often this may give reason for doubt regarding what is intended in accordance with the General Conditions and what is agreed upon in the main contract

During our review we noted that the consultancy firm being used for the projects selected for review had, in general, not been violating the contract as such but that the costs and expenses in some cases, eg with respect to travel costs, were on higher end compared to what we understand are Sida's expectations and own interpretation of the regulations. Addressing the issue with representatives from ÅF we were informed that the aim is to always follow Sida's intentions and share Sida's interpretations of the meaning in the contacts. However, we were also informed that there are instances where it has not been obvious that Sida's interpretations have changed.

ÅF uses a by consultants commonly used principle of adding a surcharge on certain expenses to cover the costs for the internal administration. These surcharges are included in the budgeted amounts in the contract. However, in order to avoid misunderstandings and different interpretations of the meaning of reimbursables we suggest that this fact be specifically included as part of the contracted amounts.

It is our understanding, based on discussions with representatives from Sida and ENEL, that expenses that arose under project 3.2 were scarcely monitored, if at all, but that expenses that occur under project 3.3 are monitored by the project management at ENEL. However, we were informed when talking to staff at ENEL that they are only in the position to confirm that the expenses charged are in line with the budget but that they are mostly not in the position to asses whether they are at lower, medium or upper end. It should, however, be noted that ENEL has not made any requests for copies of details.

Our conclusion, and recommendation, is that Sida's General Conditions for Consulting Services and the specific contracts be more specific in terms and frames. Also, we recommend that the specific contracts do not include terms that in themselves exceed Sida's own expectations, e.g. as is the case with air fares and daily allowances, unless there is a specific documented reason for departing from Sida's general routines. We also recommend that the meaning of ceiling costs be clearly defined. Finally we recommend that the routines for handling reimbursables on site be formalised, se further under section 2 in Appendix 2.

3.3.2 It should be defined who is the beneficiary of the grant from Sida

The grants received from Sida are from 1993 being recorded as long term loans to MIFIN (the Ministry of Finance). Grants received prior to 1993, before ENEL was separated from INE, were recorded directly against equity.

It is fairly clear to all parties involved that the grants provided by Sida have been granted to the government of Nicaragua and not to the individual companies . It is, however, after having separated ENEL from INE unclear if the government in its turn has granted or lent the funds to ENEL. Also, it is unclear, should the funds be considered as loan, at what interest the loans are to be accounted for.

The loans are recorded in C$ (Nicaraguan Cordobas). This may be correct provided that, should the funds be regarded as a loan, there is no obligation to repay any part of the funds in any other currency than C$. However, from ENEL's point of view also this appeared to be an open issue.

ENEL, so claims management, has repeatedly requested information from MIFIN regarding the correct accounting treatment of the funds, i.e. if they are considered a loan and if yes at what interest rate should the be carried and in what currency, but to date no reply has been obtained.

As long as ENEL remains in the possession of the Nicaraguan government the fact in what way the funds are accounted is of lesser importance other than for cost accounting and calculation purposes determining the operating results of the plants. However, the possibility of a privatisation should not be neglected in which case we believe that it be wise if Sida had clearly defined the intention of the grant and any restrictions in the long term use of the funds. This is, however, a political issue which we are unable to conclude on.

3.3.3 The possibility to assist with the financing rather than providing grants should be considered

During our closing meeting the possibility to obtain loans instead of grants was discussed. Mr Mojica pointed out that from ENEL's perspective an assistance with the financing rather than a grant may also be an alternative in order to provide the necessary funds for further investments and developments.

At present Sweden is one of the very few countries that provide unconditional grants that have not to be refunded. Most of the loans obtained are on a long-term basis and so far no interests have been paid or any amortisations made. However, it has been budgeted that

At present Sweden is one of the very few countries that provide unconditional grants that have not to be refunded. Most of the loans obtained are on a long-term basis and so far no interests have been paid or any amortisations made. However, it has been budgeted that starting 1996, which is estimated to be the first year in which ENEL makes profits the company will start to amortise on the loans. Also it should be noted that the terms between the different governments differ from the terms payable by ENEL to the Nicaraguan government. From ENEL we obtained a summary outlining the difference between the terms between the state and the lender and the state and ENEL respectively, a schedule outlining loans that are pending classification and a schedule outlining the 1996 repayment plans. The above mentioned schedules are included in Appendix 3.

Stockholm, September, 1996

Galaxicon AB

Per-Johan Svenningsson

for Price Waterhouse

Judit Nörgren Müller

TERMS OF REFERENCE FOR AUDIT AND EVALUATION OF CONSULTING SERVICES WITHIN THE PLANTA NICARAGUA REHABILITATION PROGRAMME SUPPORTED BY SIDA

1.GENERAL

Sweden has supported Nicaragua since 1979 to an amount of 3 000 MSEK of which 221 MSEK were disbursed during the fiscal year 1994/95. The support to the energy sector adds up to approximately 200 MSEK and of which 72.5 MSEK has been utilised during the current cooperation period 1993-1996.

The sector cooperation during the current period is comprised of four programmes namely:

-Hydropower development in Rio Viejo
-Institutional reinforcement of the energy authorities
-Gender activities to enhance women´s opportunities in the sector
-Rehabilitation of Planta Nicaragua

2. THE ENERGY ORGANIZATION IN NICARAGUA

The energy sector has been divided since 1995 into two bodies, INE and ENEL. The former is responsible primarily for setting policies, planning, developing natural and renewable resources and hydrocarbons and acting as a regulatory body. The latter (ENEL) is the electricity authority functioning as the entrepreneurial and operative entity responsible for generation, transmission and distribution of electric power in the country.

Prior to 1995, the energy authority was called INE. Contracts and agreements up to the end of 1994 were signed by INE.

3. GENERAL ON PLANTA NICARAGUA

Planta Nicaragua is an oil fired condensing power plant with a maximum capacity of 2x50 MW supplying one-third of the electric energy demand in Nicaragua. Sida has supported the rehabilitation of the power station since 1988 and some 150 MSEK will be disbursed by the end of 1996. The support during the earlier years covered rehabilitation of a boiler unit No 1 and included some training of personnel and was then followed by rehabilitation of unit No 2 boiler and turbogenerator No 2 including training.

The support during the current period 1993 to 1996, called phase 3 steps 1 to 3 is comprised of a major overhaul of turbogenerator 1

with auxiliaries and a comprehensive training programme for plant personnel including implementation of computerised systems for planning and management of routines for maintenance and efficiency monitoring for the plant. The task presently undertaken comprises two contracts one covering rehabilitation of turbogenerator between ENEL and ABB-Stal and the other covering consulting services and capacity/institutional building between ENEL and Ångpanneförening (ÅF). This latter contract has been commonly referred to as consulting services phase 3 step 3 or simply phase 3.3. The earlier contract for consulting services commonly named phase 3 step 2, finalised in 1995, was between Sida and ÅF. **These two contracts in particular are the subject for the evaluation and audit**. For the financial audit, however, it may be necessary that **some verifications be made also for the rehabilitation contracts** as activities could have intertwined with the consulting services contracts.

4. OBJECTIVES OF AUDIT & EVALUATION

Background

The major amount of money has been directed towards the rehabilitation and modernization of the plant through a number of contracts with entrepreneurial contractors. The remaining support, though little in money, is considered of major importance as it is related to capacity building of ENEL's staff through training and technical assistance to develop proper operations and maintenance routines including management.

No audit has been carried out by Sida in recent years and only the training component was evaluated in 1992. Since then substantial support has been allocated to continued training and the introduction of modern operation, maintenance and plant management routines.

Whilst two parties are being commissioned to undertake the function of audit and evaluation separately, it is of utmost importance that the work is correlated so that the result of the effort is considered integrally as a whole. This fact has been stressed repeatedly in the various meetings and discussions and the parties will meet and coordinate as need be to achieve a coordinated and meaningful report.

Objectives

The purpose of the assignment is to provide an independent certification that the programme funds and other sources have been applied to the project activities, are fully accounted for and have provided added value (for the complete amount of money) related to the programme. The audit shall furthermore confirm that the management of the implemented programme conforms in all

respects to the stipulation of the agreements between Sweden and Nicaragua.

Generally the audit and evaluation shall:

-provide a factual determination of the funds injected into the programme from Sida to the treasury to Nicaraguan authorities.

-determine whether funds allocated for the programme have been spent according to contracts.

-determine whether financial controls and financial management systems have been adequate for the prudent utilisation of funds under the programme.

-follow up the financial coordination mechanism from source (treasury) to receiver.

-review of budgets for the period identified.

-review of interim and annual financial statements.

-review in detail samples of investments and expenses financed by Sida.

-review in detail samples of documentation supporting requests for funds from Sida.

-evaluation of routines and systems applied for purchases, reception, storage and payment of material if and when relevant.

-evaluation of routines and internal control of the systems used for internal requisition and distribution within the project of material, equipment, petrol, etc and verify samples.

-evaluate routines for travel advances and expenses, for hotel and other accommodation, car use or hire and other similar activities carried out in Sweden or Nicaragua.

-review documentation e.g. invoices, agreements, etc arising from ENEL's contracts and agreements with other institutions similar to Sida.

-review and discuss progress reports on the results of programme financed by Sida.

-together with the engineering consult, evaluate the benefit for ENEL from the programme being financed by Sida.

Specifically the audit and evaluation shall:

-define the training and technical routines, planning and management activities carried out since July 1992.

-relate these activities to Sida's financial support, general policy, instructions and contracts between INE/ENEL, Sida and ÅF.

-briefly analyse the extent to which the recommendations of 1992 have been followed.

-assess to what extent the training efforts have been beneficial and fruitful and how long.

-assess the appropriateness of the training programme and give a recommendation for further training.

-determine, define and analyse in detail the adequacy, methodology, means of instruction, etc of the technical support, modern management and maintenance routines that have been suggested, initiated, dropped or completed.

-assess the quality of the instructors whether stationed in Nicaragua or visiting and the quality and results of their efforts.

-determine the extent to which programmes for capacity and institutional building have been planned and organised in advance and compare with how actually implemented.

-assess the real benefits and extent of actual use of new routines for spares, documentation, spares, computerized systems. Even if the staff consider these as useful tools, would they wish to have had another approach in implementation.

-make a thorough analysis of the time aspects of various activities as compared to the plans in the latest two contracts for consulting services.

-investigate and assess how the activities related to project management and quality assurance, site adviser, assistance in spares correlate to activity and manning scedules and expenditures. Determine the meaningfullness of these items in the consulting services contracts.

-make a separate analysis of ÅF's efforts in presenting the programmes, means of instructions, planning, documentation, structuring and conducting and implementing the effort or the courses or bringing about changes in routines.

-assess the general effectiveness of the cooperation including the interaction and human relations between ENEL, the Plant staff and ÅF.

5.SCOPE, TIMING, REPORTING

The scope of work should adequately cover the activities related to consulting services supported by Sida during the latest two contracts for phase 3 step 2 and 3. The two contracts should be thoroughly studied to enable comparison and evaluation of achieved and expected results.

The time for conducting the audit/evaluation shall be in the middle of June 1996. A comprehensive report shall be submitted to Sida in four copies by the end of June 1996.

6.DOCUMENTS

Documents have been handed over in the various meetings. These include contracts, Minutes, evaluation reports, progress reports, extracts of correspondence, agreements, etc. It was agreed that where only one document has been given to only one of the parties it should be shared by both. Any missing documents required for the proper performance of the task should be requested directly by you from ÅF or ENEL.

The documents provided are:

-latest contract for consulting services
-consultants evaluation report dated May 1995
-correspondence of March and April 1995
-travel reports with agreed Minutes from 1995 and up to 1996
-ENEL progress report No 2, Planta Nicaragua
-external evaluation study 1992
-other extracts from documents

other documents and correspondence including contracts related to earlier consulting services and rehabilitation of the plant shall be obtained directly from ÅF and ENEL.

TECHNICAL EVALUATION CARRIED OUT BY GALAXICON AB

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1. ÅF ENERGIKONSULT CONSULTANCY SERVICES TO PLANTA NICARAGUA SINCE 1992.

The co-operation between INE, which now is called ENEL, and ÅF Energikonsult began in 1987. The background was the bad state of the Planta Nicaragua power plant at that time and the urgent need to improve the reliability of Nicaragua's power supply. After some immediate shipping of spare parts, the program started with the first phase comprising the rehabilitation of the Unit 1 boiler system and some minor repair of other parts of that unit. ÅF were advisers and consultants to INE, while the actual rehabilitation work was carried out by separate contractors.

The co-operation continued with a second phase covering the complete rehabilitation of Unit 2, not just the boiler. During the two initial phases, ÅF also carried out some training of the power plant personnel in operation and maintenance.

Phases 1 and 2 have at least partly been evaluated previously, e.g. the assessment of the training program in 1992 made by SwedPower. Phase 3, that started in September 1992, has not been evaluated before and is the subject of the present exercise.

Phase 3.1, from September 1992 until June 1993, consisted of technical support to examine the turbogenerator and auxiliary systems of Unit 1. The phase is completed and reported. The total financial value of the support was 1 575 000 SEK.

Phase 3.2, from September 1993 until October 1995, consisted of a technical study of the excitation system for Units 1 and 2, a study of efficiency and environmental improvements for the entire power plant and a number of training courses for the plant staff. The phase is completed and reported. The total financial value was 6 259 000 SEK.

Phase 3.3 started in May 1995 and is still in execution. Technical support for the procurement of the contractor for the overhaul of Unit 1 turbogenerator is completed, as are two minor courses. All other activities are either presently going on, or not yet started. The budget for phase 3.3 is 4 875 000 SEK.

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2. EVALUATION APPROACH

The evaluation has been carried out through a short visit to ENEL's headquarters as well as to Planta Nicaragua. Some contacts have also been taken with ÅF Energikonsult in Malmö. The basis for the evaluation has been the project documents and reports and the views of the interviewed ENEL staff. Time and scope of the evaluation has not allowed any deeper inspection or control of the power plant nor of the power plant staff knowledge.

The main emphasis has been on the general design of the co-operation, the relevance of the issues and the impact on Planta Nicaragua's staff. It has not been possible to evaluate the impact in physical terms, e.g. increased availability or efficiency of the power plant. The limited time allocated for the evaluation did furthermore not allow for any complete investigation of the plant staff's views, through questionnaires or otherwise. The approach has rather been on interviews with key staff members as well as a sample of the general operating staff. A list of persons encountered is attached to this Appendix.

Only activities during phase 3 have been evaluated. In accordance with Sida's directives, the emphasis has been on the training and management aspects. As many parts of phase 3.3 were still in execution, or had not even started at the time of the visit, no full evaluation of the entire phase 3 was possible.

3. SPECIFIC REHABILITATION TASKS

Phase 3.1, the examination of unit 1, and the first step of phase 3.3, the procurement of contractor for the overhaul of unit 1, fall within this category. Also one item of phase 3.2, the study of the excitation system for units 1 and 2, can be defined as belonging to this group.

No detailed analysis has been made of the specific rehabilitation tasks, as they were given low priority in the evaluation directives. In very general terms, however, it is obvious that these activities have been quite successful. The tasks have been very specific and the ÅF and ENEL engineers have worked well together. The relevance of the activities has been absolutely clear to all involved, and the competence and know-how of the ÅF consultants has been a very valuable and important contribution to ENEL's rehabilitation ambitions.

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4. TRAINING OF PLANTA NICARAGUA PERSONNEL

This has been a major effort within phase 3. An underlying principle has been to improve the management of Planta Nicaragua, and not just give specific training to operating or maintenance staff.

The training program in phase 3.2 has been internally evaluated by ÅF in a report from July 1995. The internal evaluation was quite ambitious and extensive. There is, however, an inherent problem in evaluations carried out by the same persons that provided the service to be evaluated. The conclusion from the internal evaluation is that plant management, staff and the trainers themselves, all consider the training results satisfactory. The evaluation also indicates that there is a need for additional training in most areas. The relevance and appropriateness of the training is not discussed in any detail.

The courses given during phase 3.2 were the following:

* Maintenance of electronic components
* Maintenance management
* Operators training
* Management training
* Study tour to Sweden for Maintenance management and Management training

Maintenance of electronic components was a course directed mainly towards the technicians from the electronic workshop, but also with other participants. Modern electronic equipment has been installed as a part of the rehabilitation program, so far mainly at the inverse osmosis water treatment plant. The course took place in two periods from October 1993 to February 1994. A total of 10 engineers and technicians participated. No course had previously been given on this subject by ÅF, nor did ENEL have any internal courses of its own.

The participants that work at the electronic workshop have clearly had great use of the course and do still keep the course literature within easy reach at their workplace. They are now quite confident in the subject, but do not recommend that other staff, e.g. operators, manage the electronic equipment.

Other participants, such as instrument technicians, do not use the knowledge and claim that the course was too difficult in some parts. They obviously cannot maintain their knowledge in programming and other advanced topics. This could already be seen from the tests that ÅF carried out during the course and then repeated 6 months later. The electronic technicians had increased their knowledge in terms of test results

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half a year after the last course, whereas the other participants had dropped to a considerably lower level.

The maintenance management course was held in September 1993. The main purpose was to train ENEL staff in modern, computerised maintenance management systems, although also some general maintenance management aspects were included in the course. During the previous years, ÅF had trained their ENEL counterparts in maintenance management and had also introduced the (manual) maintenance planning system ÅFUS. The participants in the 1993 course, totally 10 persons, came from different parts of ENEL but mainly from the Planta Nicaragua maintenance management section.

A large part of the training was about the use of DDU, a computerised maintenance management system that ÅF had developed and applied mainly to buildings. The DDU system and some computer equipment was delivered from Sweden.

Clearly, the course gave the participants what for most were their first training in computerised maintenance management. Only some of the participants have continued to work with the DDU introduction after the course. It is also interesting to note that even among the so called "core group", those who would be directly involved in the DDU implementation, the knowledge as measured by tests carried out directly after the course and 10 months after, did actually go down. This should be compared with the electronics course, in which case a similar "core group" had better knowledge when 6 months had passed.

There is also a significant difference in the participants' rating for the electronics and the maintenance courses, as reported in the ÅF evaluation report. That was confirmed by the interviews during the present evaluation.

The operators training was the biggest training package. The intent was to give the entire shift groups, supervisors as well as equipment operators, a basic and general training on power plant theory and practice. Similar courses had been held in phases 1 and 2 of the co-operation.

The course was held during two periods between October 1993 and March 1994. Each shift group received one week of training in each period, a total of 47 persons participated. The teachers were ÅF consultants as well as ENEL engineers.

The outcome of this course is somewhat difficult to judge. The participants gave a rating between the electronics and the maintenance courses. The knowledge, as measured by tests immediately and 6 months after the course, is approximately the same.

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Based on the comments received during interviews, it seems that the course was fairly well appreciated, but not very specific. The operators already knew about their own segment of the plant, and did not increase their knowledge of the other segments that much. Thus, the knowledge level remained more or less the same even some time after the course.

Several operators mentioned that the training section of ENEL gave another course after ÅF. It appears that this course, on turbines, gave a stronger impression than the ÅF course.

The management training course was intended to give a general overview of the ENEL and Planta Nicaragua situation as well as some specifics on topics such as ergonomy, safety, environment etc. This was the first course of this type.

The course was carried out in two periods from November 1993 to March 1994. The instructors were from ENEL as well as from ÅF and the Karlshamn power station. The participants, 22 persons, represented the different management levels and sections of Planta Nicaragua.

There were no tests associated with the management training. The participants did however give their impressions of the course in a questionnaire, with the result that the course is judged more or less like the maintenance management course. The comments that can be heard today lead to the conclusion that the course was very general, partly interesting for those that did not have any broader knowledge of ENEL but not very useful for the improvement of the situation at Planta Nicaragua.

The study tour was the final training component of phase 3.2. Study tours to Sweden had been organised also in phases 1 and 2. Most of the participants commented positively on the study tour, claiming that the direct observation of how things are done in Swedish power stations is very useful and inspiring. The degree of technical detail in those comments convinced the evaluator that the study tour had really made an impact.

There is much less training in phase 3.3, mainly as "on the job training" in connection with the continued implementation of the DDU computerised maintenance management system. A limited group of people has received such training, the results are so far not very convincing as the DDU has not yet become an integral part of Planta Nicaragua's maintenance management.

In general terms, it should be said that the training has been carried out in a fully acceptable way. There are some comments on language problems etc, but no criticism of the technical competence of the ÅF instructors or the way they have handled the courses. In one case, the electronics course, the result is also quite impressive.

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The problem is that the other courses, although done in a proper way, may not have been what ENEL really needed. Courses that are too broad has of course a tendency to become shallow and not practically useful. This is what many of ENEL's staff claim has happened.

It is not clear why this occurred. The SwedPower evaluation from 1992 specifically comments on the training in phases 1 and 2 that "The courses have been of a general nature, giving little knowledge about plant equipment detail". Furthermore, it suggests that future training should be adjusted to the specific needs of each personnel category, it recommends training of instructors and it suggests specific middle management training.

Several of the other recommendations in the SwedPower report have however been followed, and the report has been well known by ÅF, ENEL and Sida. ÅF claims that they have provided the training that their client has asked for, while ENEL points out that the contracts for all the phases up to 3.2 were made up directly between Sida and ÅF.

Sida should carefully consider any proposals for future training at Planta Nicaragua to guarantee that the courses are appropriate and sufficiently specific, even though it is mainly ENEL's responsibility to define the course contents and make the necessary arrangements with the consultants. It is also important to take ENEL's own course program into account, before deciding or defining any further assistance. A copy of the present internal training for Planta Nicaragua is enclosed as an attachment to Appendix 2.

5. GENERAL SUPPORT

Starting with phase 3.2, ÅF has provided support to Planta Nicaragua concerning some general improvements of the power station.

A study of energy efficiency and environment characteristics of Planta Nicaragua was completed during 3.2, with recommendations for actions to be taken to improve the present situation. The main environmental problems are related to the fuel oil handling and storage and the waste water handling. Efficiency improvements have been suggested primarily in connection with the Ljungström air pre-heater and the condenser and cooling water systems.

The reports from ÅF have been useful and well received. It was noted during the visit that plant staff are fully aware of the situation and that some activities are going on, such as regular efficiency measurements. The main improvements do however require

TECHNICAL EVALUATION CARRIED OUT BY GALAXICON AB

external funding and are thus not implemented yet. It goes beyond the purpose of this evaluation to analyse ENEL's options for further actions in this field.

The other major general support concerns the DDU maintenance management system. This sub-project has been going on since 1993, when the course was held, but the DDU is not yet operational at Planta Nicaragua. Progress has been slow.

The need for a modern, computerised maintenance management system had been identified before phase 3.2. The course was seen as the start for the implementation of such a system, the first within ENEL. ÅF had already been working a lot with ENEL in maintenance management using traditional methods, and recommended ENEL to purchase DDU. It should be mentioned that DDU is a product from ÅF that initially was developed for buildings. Planta Nicaragua was to become the first power station in the world to use DDU.

The process of installing a system like DDU, there are several similar packages available, includes the description of the power station in a detailed structure. Every piece of equipment has to be described and classified and put into the data base that is the core of the system. It is claimed by ENEL that most equipment has now been introduced into DDU.

The reason that DDU has not yet been made fully operational seems to be a mix of several factors. The computer capacity at Planta Nicaragua is limited, DDU is only installed in one computer in the maintenance planning office. The Planta Nicaragua staff does not have full confidence in DDU, it is argued that DDU to some extent is not compatible with ENEL's routines and practices. The DDU has not been integrated with the spare part register, that is kept on a different computer using a different program, and such an integration is essential for the success of a system like DDU. DDU is supposed to be flexible, but ENEL does not have the knowledge to make necessary alterations. Some parts of DDU are still in English or even Swedish, which makes it hard for ENEL to fully master the program.

All in all, there were numerous complaints about DDU from the plant staff. It is also claimed by the Planta that ÅF does not provide sufficient expertise and back-up. ÅF, on their side, have complained that Planta Nicaragua has not been doing what it was supposed to do in terms of DDU work.

Both ENEL and ÅF complain about the lack of computers. This latter complaint is technically justified but difficult to understand, had ÅF/ENEL strongly believed in DDU then they would of course have been able to find the limited extra money needed to buy a few computers and printers and connect them in a network. That would have been a fairly marginal cost, compared to the cost for the DDU consultancy support. Either ENEL themselves, with their own funds, or a marginal revision of the DDU budget could have provided the necessary resources.

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It is clear that the DDU activity has to be revised, ÅF and ENEL have to reconsider the appropriateness of DDU and come up with a plan for how the full implementation shall be achieved. Without ENEL having to change its regular routines. If DDU cannot adapt to ENEL's requirements, then a different software package should be acquired. The work that has been done so far will probably not be completely lost even if ENEL does not continue with DDU.

It should be mentioned that Sweden (Bits) has supported a similar project in Costa Rica (ICE), in which computerised maintenance management systems have been implemented at a hydropower station and for the transmission transformer stations. That project has also been evaluated by Galaxicon AB in 1995. The consultant for the project has been another branch of ÅF, but the software has not been DDU. That project has been quite successful, and ICE are very pleased with the result.

TECHNICAL EVALUATION CARRIED OUT BY GALAXICON AB

6. PERSONS ENCOUNTERED AND INTERVIEWED

ENEL Headquarters
Fransisco Mojica
Manuel Chavez
Otto Escorcia
Alfonso Torres
Ivan Cortes

Planta Nicaragua
Gabriel Alvarado
Teresa Guido
Oswaldo Picado
Marco Gutierrez
Juan Quezada
Candida Villegas
Reynaldo Reyes
Orlando Torres
Ernesto Bermudez
Rafael Sandigo
Edgar Somariba
Yader Martinez
Ronald Sanabria
Roger Roque
Jose Mejia
Erwin Palacios
Silvio Rivera

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DIVISION DE GENERACION

PLANTA NICARAGUA

No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
1	Ley de la Contraloría General de la República		Lic. Mario Morales	Sandra Aguilar Mirna Rugama Hilda Baca Adrián Rojas	16	19. al 20.02.96
2	Aplicación de recubrimientos anti-corrosivos	- Tipos de recubrimientos - Aplicación en equipos de la Planta.	Ing. Pedro Cárdenas (Chesterton)	Ceferino Martínez Juan Salinas Pablo Romero	24	21. al 23.02.96
3	Rodamientos	- Tipos de rodamientos - Aplicación en equipos de la Planta.	Dr. Fernando Sánchez	Ceferino Martínez Yader Quintero Francisco Zapata Fausto Romero	24	27. al 29.02.96
4	Mantenimiento de Bombas		Dr. Fernando Sánchez Ing. María Teresa Ponce	Francisco Zapata Ramón Medrano Marcial Aguilar Jorge Toval	24	11. 13. al 15.03.96
5	Técnicas de Buceo		Técn. Julio Mairena	Francisco Zapata	40	18. al 22.03.96
6	Computación Excel para Windows, Programación y Redes, Transferencia electrónica de datos INTERNET.		Escuelas que brinden esta enseñanza	Mirna Rugama Esmeralda Madrigal Mayra Monterrey Benito Prado Orlando Tórres		26. al 29.03.96

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PLANTA NICARAGUA

No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
7	Electrónica para Instrumentistas	- Electrónica básica - Rectificación de corriente - Aplicación en circuitos integrados.	Ing. William Pérez	Benito Barrios Orlando Mungula Luis Vargas Danilo Flores	32	15. al 18.04.96
8	Seguridad y Prevención de Accidentes de Trabajo		Técn. Julio Mairena Técn. Cristhian Cuadra	Teresa Guido Sandra Aguilar Domingo Centeno Adrián Rojas Ronald Sanabria Cándida Villegas Róger Roque Orlando Tórres	24	22. al 24.04.96
9	Seguridad Industrial y Prevención de incendios		Técn. Cristhian Cuadra Coordinación con SINACOI y C.P.F.	José Aráuz Orlando Mungula Marvin Delgadillo Anastasio Rosales Hamilton Palma Victor López Rafael Bency Miguel García Jorge Quezada Bernardo Gallo Noel Dolmuz Benito López Rafael Sándigo	16	06. al 07.05.96

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No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
10	Legislación Laboral. (4 módulos)	- Código del Trabajo y su aplicación. - Relación Código del Trabajo y Reglamento Interno	Dra. Elba Baca	Sandra Aguilar Teresa Guido Domingo Centeno Marina Blanco Adrián Rojas	32	14. al 17.05.96
11	Mantenimiento Máquinas-Herramientas		Técn. Luis Pérez	Osmán Zapata Rafael Bency	24	20. al 22.05.96
12	Programación y Administración de Mantenimientos.	- Planificación, Organización, Control. - Admón. eficaz de recursos humanos y materiales - Aplicación en casos.	UNI	Teresa Guido Adrián Rojas Ronald Sanabria Orlando Tórres	24	Mayo
13	Administración del Mantenimiento auxiliado por computadoras Microsoft Project		Ing. Darío Jirón Licda. Silvia Moncada	Teresa Guido Oswaldo Picado Isaac Mayorga	40	03. al 07.05.96
14	Vibraciones, Balanceo y Alineación de Equipos Rotativos		Dr. Fernando Sánchez	Juan C. Fonseca Juan Salinas Yader Quintero Apolonio Soto	24	03. al 05.06.96

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No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
15	Instrumentación		Ing. William Pérez	Isaac Mayorga Roberto Téllez Teresa Guido Ma. Félix Cárcamo Julio Cano Hipólito Muñoz	24	10. al 12.06.96
16	Legislación Laboral. (4 módulos)	- Código del Trabajo y su aplicación. - Relación Código del Trabajo y Reglamento Interno	Dra. Elba Baca	Sandra Aguilar Teresa Guido Domingo Centeno Marina Blanco Adrián Rojas	32	20. al 21.06.96
17	Programa Gerencial (4 módulos)		A.E.D. INCAE UAM	Sandra Aguilar Teresa Guido Domingo Centeno	160	Julio
18	Sistema de Control de Rectificadores de Potencia e Inversores.		Ing. Uriel Ulloa Ing. Enrique Corea Ing. William Pérez	Marvin Delgadillo Ronald Herrera Tomás Ojeda Isaac Mayorga	24	01. al 03.07.96
19	Métodos de Conservación de Caldera Control de Corrosión		Lic. Benjamin Cuadra	Domingo Centeno Orlando Tórres Róger Roque Guadalupe Moreno Juan C. Quezada Eloy Escoto	32	22. al 25.07.96

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No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
20	Programa Gerencial (4 módulos)		A.E.D. INCAE UAM	Sandra Aguilar Teresa Guido Domingo Centeno	160	Agosto
21	Operación Turbinas a Vapor		Sr. José Olivares Dr. Fernando Sánchez	Róger Rojas Miguel García A. Cristino Delgado Pastor Pérez Máximo Toruño Douglas Blanco Sebastián Rojas César Rivera José R. Obando Marvin Ojeda	32	05. al 08.08.96
22	Administración y Control de Inventario (Manejo de almacenes y bodegas)		Lic. Mario Morales	Benito Prado Jorge Quezada Hilda Baca José Gómez	24	21. al 23.08.96
23	Calderas de Vapor de Alta Presión		Sr. José Olivares	Marvin Ojeda Bernardo Gallo Cristino Delgado Uriel Mora Reynaldo Reyes Sergio López	32	02. al 05.09.96

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PLANTA NICARAGUA

No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
24	Importaciones	- Procedimientos: Solicitud de Compras Ordenes de Compra Adquisición	RUCFA O PROCOMIN	Sandra Aguilar Teresa Guido	40	23. al 27.09.96
25	Mantenimiento de Compresores		Ing. Pedro Cárdenas	Apolonio Soto Cecilio Acuña	24	25. al 27.09.96
26	Redacción de Informes Técnicos		Licda. Nonia Almendárez	Jaime Amuero Ceferino Martinez Pablo Romero Julio Gallo Mario Bermúdez	24	02. al 04.10.96
27	Instrumentación Módulo III		Técn. Sergio Lizano	Ma. Largaespada Ma. Félix Cárcamo Yader Martinez	32	07. al 10.10.96
28	Regulación de Turbinas		Dr. Fernando Sánchez Técn. Mario Bermúdez	Apolonio Soto Jorge Toval Fausto Romero Cecilio Acuña	32	14. al 17.10.96
29	Operación de Controles Térmicos		Sr. José Olivares	Miguel Garcia A. Rafael Sándigo Oscar Valle	32	28. al 31.10.96

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DIVISION DE GENERACION

PLANTA NICARAGUA

No.	NOMBRE DE LA ACCION	CONTENIDO PROPUESTO	INSTRUCTORES	PARTICIPANTES	No. HOR.	FECHA PROP.
30	Metalografía y Tratamiento Térmico	- Marcas de eléctrodos comerciales a aplicarse en materiales ferrosos y no ferrosos. Tablas guías. - Técnicas p/temples en acero y revenidos	UNI	Gustavo Vázquez Federico López José Pérez V. Ernesto Hernández Osmán Zapata	32	Octubre
31	Mantenimiento a Bancos de Baterías		Ing. César López	Julián Flores Isidro Rodríguez Luis Vargas	8	06.11.96
32	Mecánica Industrial	- Elementos de máquinas en general - Dibujo técnico (piezas)	UNI	Fausto Romero Cecilio Acuña Yader Quintero Jorge Toval Ramón Medrano	40	Noviembre
33	Técnicas de Control de Calidad de aceites, combustibles y lubricantes (Adiestramiento en uso de equipos)		UNI PETRONIC Refinería ESSO	Carlos Trujillo Cándida Villegas Pedro Esquivel	40	Noviembre

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We visited both Ångpanneföreningen in Malmö and ENEL in Managua. The purpose of these visits was to discuss and evaluate the accounting routines in accordance with the agreed procedures as described in Appendix 1. We want to emphasise that our review did only include transactions arising from the projects 3.2 and 3.3. Also, we want to emphasise that we have not made an evaluation of either Ångpanneföreningen's or ENEL's internal control or accounting routines in general but focused only on specific areas. We are therefore not able to conclude on the mentioned companies internal control or accounting routines on a total basis.

1. VISIT AT ÅNGPANNEFÖRENINGEN, MALMÖ

We visited Ångpanneföreningen (ÅF) in Malmö on 10 June and then met with the accounting manager Anders Rignér and his assistant Ann-Kristin Bååth. We spent the first hour discussing the procedures and accounting routines at ÅF and the rest of the day performing tests on a sample of transactions within project 3.2 and 3.3

On 26 June a second visit was made in order to perform additional tests and to meet with the project manager Mats Johansson who could then provide additional information.

1.1 Description of the routines at ÅF

Time and expense reports are completed by all staff once a week. The sheets are registered into a computerised system. The system provides the following information:

time name of consultant, year-week, number of hours, scale and total scale

expenses type of expense/name of supplier, year-week, voucher number and amount

The system also provides information on invoices issued and adjustments made, if any. The system made it possible to obtain full audit trail to and from the individual vouchers.

Fees and expenses are invoiced on a monthly basis. The invoices are prepared based on billing summaries provided by the system.

The project costs are closely monitored by the project manager, i.e. in this case Mr Mats Johansson. Also, he approves the time- and expense reports prepared by other members of the staff.

A general administration-charge is added to all direct costs except internal copying costs, (which are charged to the code based on a report printed by the copying machine), scale value and daily allowances. In our sample the charge varied between 6% and 10% but should according to our discussions with Mr Mats Johansson normally be 6%. The purpose of the administration charge is to cover for handling costs related to external invoices.

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1.2 Adherence to the contract with Sida

We tested a sample time reports for both project 3.2 and 3.3 against the project summaries with no exceptions. We also tested samples of expense reports, invoices, daily allowances and minor expenses. The expense reports are all approved by the project manager, Mr Mats Johansson. His own reports are, however, in general not approved. The expenses were, with some exceptions, duly supported by cash receipts etc. Also, invoices are checked and approved by Mr Johansson.

We noted when reviewing a sample of invoices related to air travel that during the period when phase 3.2 was running in general business class tickets were bought. During the period that phase 3.3 has been running in general excursion type of tickets have been used and the travel costs were in average kSEK 17-kSEK 19. By travelling by APEX the travel costs could probably have been decreased by approximately kSEK 5-kSEK 6 by flight occasion. However, the cost for possible extra hotel nights required should then also be evaluated. We discussed the issue with Mr Johansson who informed that during the 80-ies and during the first couple of years in the 90-ies business class travel was widely accepted by Sida. Subsequent to Sida changing the rules and informing that economy class travel should be used this policy was also adopted by ÅF. The travel costs during Phase 3.3 are, compared to APEX prices, on the higher edge but within the contracted budgeted amounts.

The daily allowances paid amount to SEK 400 which is significantly higher than the guidelines provided by the Tax authorities and which are to be used according to Sida. However, the rate of SEK 400 was clearly noted in ÅF's detailed budget which formed an integral part of the contract.

We reviewed a sample of expense reports related to Phase 3.2. during a period when several staff members from ÅF stayed in Nicaragua. We noted one instance where it appears that the same cost has been charged twice. On voucher number 6918 from week 9347 a refund of SEK 4.159.04 related to purchases of petrol during the period September-October 1993. On voucher 7236 from week 9352 a refund of exactly the same amount is claimed for exactly the number of gallons during the same period, ie September-October.

In the sample tested we also noted that there are a number of receipts related to staff having been engaged and remunerated as drivers, house-keepers etc. This staff is also refunded for various purchases for household items, food and beverages etc. The receipts are in general hand written with no other sign of identification than the name of the recipient on a blank piece of paper. We would recommend that the routine for refunding expenses related to driving, cleaning and other housing services be more formalised. The most recommendable routine would be that ENEL pays for the running costs at the site and then recharges ÅF providing details of the costs on an accompanying form, authorised by the ÅF staff being on the site at the specific occasion.

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In general we noted that some of the items tested may leave room for dispute depending on the interpretation of the contractual terms. However, and we find this important to emphasise, we noted that the expenses incurred did not exceed the budgeted amounts as disclosed in the contract. In order to avoid any doubts we would recommend that the terms regarding the level and type of expenses be more specific and detailed.

2. VISIT AT ENEL, MANAGUA

On 12 - 14 June we visited ENEL on site in Managua. The agenda was as follows:

12 June

In the morning we, including Mr Svenningsson from Galaxicon AB, met with Mr Hagvall at the Swedish embassy. During this meeting we discussed the purpose of our visit and we also informed about our plans. After this meeting we were joined by Mr Cuadra and Mr Díaz from Price Waterhouse and went to ENEL.

There we met with Mr Otto Escorcia, Mr Alfonso Torres and Mr Manuel Chavez. We then informed the gentlemen from ENEL about the purpose of the visit and gave a brief outline of what we expected to accomplish during the following days. Mr Svenningsson had in beforehand arranged for a number of meetings and also with the plant visit that took place later in the day.

In the afternoon we visited Planta Nicaragua and met with the managing director of the plant, Mr Gabriel Alvarado who informed about the operations in general. During the meeting we discussed his thoughts about the quality of the work carried out by ÅF, the computer systems provided and what he regarded as further developments and investments required on the plant and the computer systems in order to achieve a higher level of efficiency. The subject and the result of the discussions with Mr Alvarado is further described as part of Mr Svenningsson's technical evaluation in Appendix II.

During the visit we also took the opportunity to physically inspect the machinery and equipment provided by ÅF. The value of this equipment is, however, not significant and amounts to some kSEK 125.

Having returned from the plant we had an hours meeting with Mr Otto Escorcia to discuss his control procedures regarding the invoices received from ÅF. Mr Escorcía informed that he reviews all incoming invoices and assesses the reasonability. He also mentioned that he obtains copies of the weekly time reports prepared by the staff at ÅF when working in Nicaragua.

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13 June

In the morning we met with Mr Ivan Cortéz and his accounting team and also a representative from the budget department. We spent about two hours discussing the accounting routines, GAAP issues with respect of accounting for grants vs loans, how to treat the positive count differences arising due to stock items being part of the grants etc. The rest of the day was spent on testing the accounting of invoices.

14 June

In the morning the testing work was finalised.

In the afternoon we met with the internal auditor, Mr Ismael Morales who informed about his function and position within the company. The main purpose of meeting with Mr Morales was to be informed about his view on the internal control and accounting routines at ENEL.

Late in the afternoon we had a closing meeting during which Mr Svenningsson from Galaxicon and we from Price Waterhouse informed in brief about the results of our meetings and discussions with various representatives at ENEL.

2.1 Accounting routines and internal control procedures at ENEL

2.1.1 Review and approval of invoices from ÅF

The invoices received from ÅF are reviewed and approved by the project manager, i.e. Mr Otto Escorcía. He assesses the reasonableness of time and expenses charged and if they are in line with the detailed budget. Also, he obtains copies of the weekly time sheets prepared by ÅF's consultants when working in Nicaragua.

During our discussions with Mr Escorcía we were informed that the procedures are now in principle the same as before, but that, as a result of the contract regarding Phase 3.3 having been written directly between ENEL and ÅF, they feel more comfortable in approving and assessing the reasonableness of the costs. However, Mr Escorcía also pointed out that in respect of costs and time that has been incurred outside Nicaragua he can only check that these costs per item and hour are in line with the contract.

In general, however, Mr Escorcía has experienced no problems with the costs charged and knows of no situation where the charges have been challenged.

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2.1.2 Accounting of invoices

Subsequent to the approval copies of the invoices are passed on to the budget and to the accounting department. The invoices received are accounted for as work in progress until the project is finalised. All costs are included, i.e. such as machinery & equipment, spare parts, consultancy services etc. When the project has been finalised the total amount is capitalised and depreciated over a period which varies depending on the type of project.

We followed all transactions related to project 3.2 and 3.3 into the general ledger and found no exceptions to the above routine. However, we noted that one invoice was missing and it appears it never arrived at ENEL as it was missing in all departments. Having returned to Sweden a copy was faxed to Mr Ivan Cortéz. Also, we noted some minor accounting errors but these were then corrected by the staff at the accounting department.

In general there was a good audit trail between the transactions and the recording in the ledgers. All project are easily identifiable and reconcilable against contracts by using separate accounts.

2.1.3 Accounting for grants

During our discussions with the various representatives at ENEL the uncertainty regarding the accounting for grants received from Sweden was raised. The issue had been addressed also by the present and the former auditors and is a matter for concern for ENEL not only from an accounting point of view but also from an evaluation of the operations aspect. A more detailed description is found in section 3.3.2 of the report.

2.1.4 Accounting for assets

As mentioned above all project costs are recorded as work in progress until the project has been finalised. The amount is capitalised in a lump sum including both consultancy costs, stock items such as spare parts, machinery, equipment etc. When performing stock counts of spare parts, these have resulted in significant overages. This is due to that spare parts being received as part of a major project have not been separated in the stock system neither in the fixed assets system. It has been suggested to record it as a positive count difference. However, this would result in these spare parts being recorded twice, once as part of a project and once as a count difference.

The issue has been addressed by both the former and the present auditors. At ENEL activities are being undertaken to find a practical solution on how to separate the stock being purchased or obtained as part of the grant from stock purchased as part of the ordinary business.

ANEXO

INSTITUTO NICARAGUENSE DE ELECTRICIDAD
COMPARATIVO DE LAS CONDICIONES DE PRESTAMOS
OTORGADOS A ENEL POR MEDIO DEL GOBIERNO

CONDICIONES EN QUE RECIBIO ENEL EL PRESTAMO — CONDICIONES OTORGADAS AL GOBIERNO

ITEM	DATOS GENERALES	PRESTAMO GOBIERNO / ENEL SEGUN CONVENIO		PRESTAMOS GOBIERNO / ORGANISMOS BILATERALES Y MULTILATERALES	
01	MRN - BID - PRESTAMO # 872-SF-NI FIRMA CONVENIO : Enero 30, 1992 MONTO : US$ 19,000,000.00 OBJETO : PROY. REHAB. SIST. ELECT.	PLAZO DE CANCELACION : 30 AÑOS PERIODO DE GRACIA : 10 AÑOS (incluidos en plazo) NUMERO DE CUOTAS : 40 - Semestrales PAGO PRIMERA CUOTA : 24-07-2002 PAGO ULTIMA CUOTA : 24-01-2022 CUOTA DE AMORTIZACION : US$ 475,000.00	INTERESES CORRIENTES : 7.5 % COMISION DE COMPROMISO : No especifica el convenio COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : Idem INTERESES MORATORIOS : Idem INTERESES A PAGAR : US$ 24,492,051.00	PLAZO DE CANCELACION : 40 Años PERIODO DE GRACIA : 10 Años NUMERO DE CUOTAS : 60 - Semestrales PAGO PRIMERA CUOTA : 24-07-2002 PAGO ULTIMA CUOTA : 24-01-2032 CUOTA DE AMORTIZACION : US$ 316,666.67	INTERESES CORRIENTES : 1 % Durante el período de gracia IDEM : 2 % Durante el período de cancel. COMISION DE COMPROMISO : 0.5 % COMISION DE CREDITO : ? GTOS. SUPERV. Y CONTROL : ? INTERESES A PAGAR : US$ 7,344,569.20
02	MRN - BID - PRESTAMO # 933 FIRMA CONTRATO : Noviembre 09, 1994 MONTO : US$ 13,921,000.00 OBJETO : Cerrar brecha financiera - 1994 GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 40 Años PERIODO DE GRACIA : 10 Años (incluidos en plazo) NUMERO DE CUOTAS : 60 - Semestrales PAGO PRIMERA CUOTA : Enero 23, 2005 PAGO ULTIMA CUOTA : Enero 23, 2035 CUOTA DE AMORTIZACION : US$ 232,016.67	INTERESES CORRIENTES : 1 % S/período de gracia COMISION DE COMPROMISO : 2 % S/período de cancelación COMISION DE GESTION : (pag. a partir del 23 de Enero/96) GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : -0- INTERESES A PAGAR : US$ 5,643,905.42	PLAZO DE CANCELACION : PERIODO DE GRACIA : NUMERO DE CUOTAS : PAGO PRIMERA CUOTA : PAGO ULTIMA CUOTA : CUOTA DE AMORTIZACION :	INTERESES CORRIENTES : NO TENEMOS CONTRATO COMISION DE COMPROMISO : COMISION DE GESTION : GTOS. SUPERV. Y CONTROL : INTERESES MORATORIOS : INTERESES A PAGAR :
03	MRN - FAD - ICO (ESPAÑA) FIRMA CONVENIO : Marzo 01, 1994 MONTO : US$ 7,200,000.00 OBJETO : AMP. Y MEJ. DEL SIST. TRANSM. GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 25 Años PERIODO DE GRACIA : 5 Años (incluidos en plazo) NUMERO DE CUOTAS : 40 - Semestrales PAGO PRIMERA CUOTA : Septiembre, 1999 PAGO ULTIMA CUOTA : Marzo 01, 2019 CUOTA DE AMORTIZACION : US$ 107,500.00	INTERESES CORRIENTES : 5 % COMISION DE COMPROMISO : No especifica el convenio COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : Idem INTERESES MORATORIOS : Idem INTERESES A PAGAR : US$ 5,794,958.00	PLAZO DE CANCELACION : 30 Años PERIODO DE GRACIA : 9 Años (incluidos en plazo) NUMERO DE CUOTAS : 43 - Semestrales PAGO PRIMERA CUOTA : Julio 27, 2002 PAGO ULTIMA CUOTA : Julio 27, 2023 CUOTA DE AMORTIZACION : US$ 174,419.60	INTERESES CORRIENTES : 0.5 % INT. DURANTE LA CONST. : 0.5 % COMISION DE COMPROMISO : 0.10 % S/no desembolsado COMISION DE GESTION : 0.25 % S/importe del CR INTERESES MORATORIOS : Libor + 1% INTERESES A PAGAR : US$ 701,938.00
04	MRN - FAD - ICO (ESPAÑA) FIRMA CONVENIO : Marzo 08, 1995 MONTO : US$ 9,112,500.00 OBJETO : Sumin. constr. y mont. de la estac. Masaya - S.R. del Sur y S.E. Asoc. GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 25 Años PERIODO DE GRACIA : 5 Años (incluidos en plazo) NUMERO DE CUOTAS : 40 - Semestrales PAGO PRIMERA CUOTA : Septiembre 08, 2001 PAGO ULTIMA CUOTA : Marzo 08, 2021 CUOTA DE AMORTIZACION : US$ 227,812.50	INTERESES CORRIENTES : 5 % (deveng. partir 08-03-95) COMISION DE COMPROMISO : No especifica el convenio COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : Idem INTERESES MORATORIOS : Idem INTERESES A PAGAR : US$ 7,044,848.94	PLAZO DE CANCELACION : 30 Años PERIODO DE GRACIA : 9 Años (incluidos en plazo) NUMERO DE CUOTAS : 43 - Semestrales PAGO PRIMERA CUOTA : Enviarán tabla de amortización PAGO ULTIMA CUOTA : Idem CUOTA DE AMORTIZACION : US$ 211,918.60	INTERESES CORRIENTES : 0.5 % COMISION DE COMPROMISO : 0.10 % S/no desembolsado COMISION DE GESTION : 0.25 % S/importe del CR GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : Tasa LIBOR más el 1 % INTERESES A PAGAR : US$ 1,023,587.50
05	MRN - FIV - FDO. DE INVERS. DE VENEZ. FIRMA CONVENIO : Junio 22, 1994 MONTO : US$ 13,320,000.00 OBJETO : PROY GEOT. HOYO MONTE GALAN GALAN Y MOMOTOMBO III GARANTIA Aval del MRN	PLAZO DE CANCELACION : 10 Años PERIODO DE GRACIA : 2 Años NUMERO DE CUOTAS : 16 - Semestrales PAGO PRIMERA CUOTA : Diciembre 30, 1996 PAGO ULTIMA CUOTA : Junio 30, 2004 CUOTA DE AMORTIZACION : US$ 830,000.00	INTERESES CORRIENTES : 6 % COMISION DE COMPROMISO : No especifica el contrato COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : 1 % Sobre monto del CR. INTERESES MORATORIOS : 1 % Anual S/saldo vencido INTERESES A PAGAR : US$ 4,043,400.00	PLAZO DE CANCELACION : 10 Años PERIODO DE GRACIA : 2 Años NUMERO DE CUOTAS : 16 - Semestrales PAGO PRIMERA CUOTA : Diciembre 30, 1996 PAGO ULTIMA CUOTA : Junio 30, 2004 CUOTA DE AMORTIZACION : US$ 830,000.00	INTERESES CORRIENTES : 6 % INT. DURANTE LA CONST. : No especifica el contrato COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : 1 % Sobre monto del CR INTERESES MORATORIOS : 1 % Anual S/saldo vencido INTERESES A PAGAR : US$ 4,043,400.00
06	MRN - FINLANDIA FIRMA CONVENIO : Febrero 25, 1994 MONTO : US$ 2,737,817.00 = FIM 15,435,131. OBJETO : Pta. generadora diesel - Managua 4.2 MW GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 20 Años PERIODO DE GRACIA : 5 Años NUMERO DE CUOTAS : 30 - Semestrales PAGO PRIMERA CUOTA : Agosto 15, 1999 PAGO ULTIMA CUOTA : Febrero 15, 2014 CUOTA DE AMORTIZACION : US$ 90,264.00	INTERESES CORRIENTES : 5 % - partiendo del 15-08-94 COMISION DE COMPROMISO : -0- COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : -0- INTERESES A PAGAR : US$ 1,743,835.00	PLAZO DE CANCELACION : PERIODO DE GRACIA : NUMERO DE CUOTAS : PAGO PRIMERA CUOTA : PAGO ULTIMA CUOTA : CUOTA DE AMORTIZACION :	INTERESES CORRIENTES : No tenemos el contrato COMISION DE COMPROMISO : COMISION DE GESTION : NOTA: Amortización e intereses se pagarán a la D.G.T. del MRN GTOS. SUPERV. Y CONTROL : INTERESES MORATORIOS : INTERESES A PAGAR :
07	MRN - NORUEGA FIRMA CONVENIO : Diciembre 17, 1993 MONTO : US$ 3,300,000.00 = NOK 5.0 mil. OBJETO : PROY. AMP. Y MEJORAS DEL SIST. TRANSM. GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 3 Años PERIODO DE GRACIA : 1 Año incluidos en plazo NUMERO DE CUOTAS : 8 - Trimestrales PAGO PRIMERA CUOTA : Marzo 15, 1995 PAGO ULTIMA CUOTA : Diciembre 15, 1996 CUOTA DE AMORTIZACION : US$ 412,500.00	INTERESES CORRIENTES : 5 % COMISION DE COMPROMISO : -0- COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : -0- INTERESES A PAGAR : US$ 180,009.00	PLAZO DE CANCELACION : PERIODO DE GRACIA : NUMERO DE CUOTAS : PAGO PRIMERA CUOTA : PAGO ULTIMA CUOTA : CUOTA DE AMORTIZACION :	INTERESES CORRIENTES : No tenemos contrato COMISION DE COMPROMISO : COMISION DE GESTION : NOTA: Amortización e intereses se pagarán a la D.G.T. del MRN GTOS. SUPERV. Y CONTROL : INTERESES MORATORIOS : INTERESES A PAGAR :
08	MRN - KFW DE ALEMANIA FIRMA CONVENIO : Marzo 24, 1993 MONTO : US$ 6,230,530.00 - DM 10.0 mil OBJETO : Rehab. red de distrib. electrica - F-I PAGOS : D.G.T. del MRN - encórdobas (FIRMADO POR COOPERACION EXTERNA)	PLAZO DE CANCELACION : 20 Años PERIODO DE GRACIA : 4 Años incluidos en plazo NUMERO DE CUOTAS : 32 Semestrales PAGO PRIMERA CUOTA : Junio 30, 1997 PAGO ULTIMA CUOTA : Diciembre 30, 2012 CUOTA DE AMORTIZACION : US$ 194,704.00	INTERESES CORRIENTES : 8 % COMISION DE COMPROMISO : 0.25 % S/no desembolsado COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0 INTERESES MORATORIOS : Tasa del KFW más 2 % INTERESES A PAGAR : US$ 4,740,517.00	PLAZO DE CANCELACION : 40 Años PERIODO DE GRACIA : 10 Años, incluidos en plazo NUMERO DE CUOTAS : 60 - Semestrales PAGO PRIMERA CUOTA : Junio 30, 2003 PAGO ULTIMA CUOTA : Diciembre 30, 2032 CUOTA DE AMORTIZACION : US$ 103,842.00	INTERESES CORRIENTES : 0.75 % S/saldo desembolsado COMISION DE COMPROMISO : 0.25 % S/no desembolsado COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : Tasa del D. B. más 3 % INTERESES A PAGAR : US$ 974,878.42
09	MRN KFW DE ALEMANIA FIRMA CONVENIO : Noviembre 29, 1994 MONTO : US$ 9,651,808.55 - DM 15.0 mil OBJETO : Rehab. y Ampl. Redes Dist. Elec. F-II PAGOS : D.G.T. del MRN - encórdobas (FIRMADO POR COOPERACION EXTERNA)	PLAZO DE CANCELACION : 20 Años PERIODO DE GRACIA : 5 Años NUMERO DE CUOTAS : 30 - Semestrales PAGO PRIMERA CUOTA : Diciembre 30 1999 PAGO ULTIMA CUOTA : Junio 30, 2014 CUOTA DE AMORTIZACION : US$ 321,729.62	INTERESES CORRIENTES : 6 % COMISION DE COMPROMISO : 0.25 % S/no desembolsado COMISION DE GESTION : GTOS. SUPERV. Y CONTROL : INTERESES MORATORIOS : Tasa del KFW más 3 % INTERESES A PAGAR : US$ 8,225,466.11	PLAZO DE CANCELACION : 40.5 Años PERIODO DE GRACIA : 10 Años, incluidos en plazo NUMERO DE CUOTAS : 61 - Semestrales PAGO PRIMERA CUOTA : Diciembre 30, 2004 PAGO ULTIMA CUOTA : Diciembre 30, 2034 CUOTA DE AMORTIZACION : US$ 158,250.97	INTERESES CORRIENTES : 0.75 % S/saldo desembolsado COMISION DE COMPROMISO : 0.25 % S/no desembolsado COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : 3 % S/saldo vencido INTERESES A PAGAR : US$ 1,556,367.03

ANEXO I

INSTITUTO NICARAGUENSE DE ELECTRICIDAD
COMPARATIVO DE LAS CONDICIONES DE PRESTAMOS
OTORGADOS A ENEL POR MEDIO DEL GOBIERNO

CONDICIONES EN QUE RECIBIO ENEL EL PRESTAMO

CONDICIONES OTORGADAS AL GOBIERNO

ITEM	DATOS GENERALES	PRESTAMO GOBIERNO / ENEL – SEGUN CONVENIO		PRESTAMOS GOBIERNO / ORGANISMOS BILATERALES Y MULTILATERALES	
10	MIRN – FINLANDIA FIRMA CONVENIO : Octubre 07, 1992 MONTO : C$ 21,679,511.50 = US$ 4,333,302.30 Sin mante. de valor T/C 5.0 x 1.0 OBJETO : L/Crédito - materiales eléctricos GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 8 Años PERIODO DE GRACIA : 2 Años, incluidos en plazo NUMERO DE CUOTAS : 12 – Semestrales PAGO PRIMERA CUOTA : Enero 15, 1995 PAGO ULTIMA CUOTA : Julio 15, 2002 CUOTA DE AMORTIZACION : US$ 361,108.53 x 5.00	INTERESES CORRIENTES : 5 % COMISION DE COMPROMISO: No especifica el convenio COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : Idem INTERESES MORATORIOS : Idem INTERESES A PAGAR : US$ 1,103,107.00	PLAZO DE CANCELACION : 27 Años PERIODO DE GRACIA : 9 Años NUMERO DE CUOTAS : 36 – Semestrales PAGO PRIMERA CUOTA : Junio 30, 1998 PAGO ULTIMA CUOTA : Diciembre 31, 2015 CUOTA DE AMORTIZACION : US$ 120,369.51	INTERESES CORRIENTES : 0.75 % COMISION DE COMPROMISO: -0- COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : -0- INTERESES A PAGAR : US$ 414,372.03
11	MIRN – URSS FIRMA CONVENIO : Octubre 07, 1992 MONTO : C$ 703,981.25 = US$ 140,702.25 Sin mante. de valor T/C 5.0 x 1.0 OBJETO : L/Crédito - materiales eléctricos GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 8 Años PERIODO DE GRACIA : 2 Años NUMERO DE CUOTAS : 12 – Semestrales PAGO PRIMERA CUOTA : Enero 15, 1995 PAGO ULTIMA CUOTA : Julio 15, 2002 CUOTA DE AMORTIZACION : US$ 11,737.09 x 5.00	INTERESES CORRIENTES : 5 % COMISION DE COMPROMISO: No especifica el convenio COMISION DE GESTION : Idem GTOS. SUPERV. Y CONTROL : Idem INTERESES MORATORIOS : Idem INTERESES A PAGAR : US$ 35,843.00	PLAZO DE CANCELACION : PERIODO DE GRACIA : NUMERO DE CUOTAS : PAGO PRIMERA CUOTA : PAGO ULTIMA CUOTA : CUOTA DE AMORTIZACION :	INTERESES CORRIENTES : NO TENEMOS CONTRATO COMISION DE COMPROMISO: COMISION DE GESTION : GTOS. SUPERV. Y CONTROL : INTERESES MORATORIOS : INTERESES A PAGAR :
12	MIRN – BCIE – PRESTAMO # BCIE 4 0253 U FIRMA CONTRATO : Julio 30, 1992 MONTO : US$ 9,800,000.00 OBJETO : Proy. Rehabil. Sist. Transm. Elect.	PLAZO DE CANCELACION : 15 Años PERIODO DE GRACIA : 3 1/2 Años, incluidos en plazo NUMERO DE CUOTAS : 23 – Semestrales PAGO PRIMERA CUOTA : Julio 30, 1996 PAGO ULTIMA CUOTA : Julio 30, 2007 CUOTA DE AMORTIZACION : US$ 426,086.96	INTERESES CORRIENTES : 7.7 % S/365 días COMISION DE COMPROMISO: 0.75 % S/saldo no desembolsad COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : -0- INTERESES A PAGAR : US$ 5,048,501.00	PLAZO DE CANCELACION : 15 Años PERIODO DE GRACIA : 3 1/2 Años incluidos en plazo NUMERO DE CUOTAS : 23 – Semestrales PAGO PRIMERA CUOTA : Julio 30, 1996 PAGO ULTIMA CUOTA : Julio 30, 2007 CUOTA DE AMORTIZACION : US$ 420,080.91	INTERESES CORRIENTES : 7.7 % S/365 días COMISION DE COMPROMISO: 0.75 % S/saldo no desembolsado COMISION DE GESTION : -0- GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : -0- INTERESES A PAGAR : US$ 5,046,591.00
13	MIRN – BANCO DE SANTANDER, S. A. FIRMA CONVENIO : Marzo 10, 1994 MONTO : US$ 7,500,000.00 OBJETO : L/Trans. Esperanza - Bluefields y S E / PAGOS : GARANTIA Ingresos p/facturación del Gobierno	PLAZO DE CANCELACION : 9 años 8 meses PERIODO DE GRACIA : 20 meses, incluidos en plazo NUMERO DE CUOTAS : 16 – Semestrales PAGO PRIMERA CUOTA : Noviembre 23, 1995 PAGO ULTIMA CUOTA : Mayo 23, 2003 CUOTA DE AMORTIZACION : US$ 468,750.00	INTERESES CORRIENTES : 6.09 % COMISION DE COMPROMISO: -0- COMISION DE GESTION : 0.625 % S/CR GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : 6.09 % + 1% INTERESES A PAGAR : US$ 2,232,161.00	PLAZO DE CANCELACION : 9 años 8 meses PERIODO DE GRACIA : 20 meses, incluidos en plazo NUMERO DE CUOTAS : 16 – Semestrales PAGO PRIMERA CUOTA : Noviembre 23, 1995 PAGO ULTIMA CUOTA : Mayo 23, 2000 CUOTA DE AMORTIZACION : US$ 468,750.00	INTERESES CORRIENTES : 6.09 % COMISION DE COMPROMISO: -0- COMISION DE GESTION : 0.625 % S/CR GTOS. SUPERV. Y CONTROL : -0- Este convenio es INTERESES MORATORIOS : 6.09%+ 1% BANCO – ENEL INTERESES A PAGAR : US$ 2,232,161.00
14	MIRN – BANCO DE SANTANDER, S. A. FIRMA CONVENIO : No se firmo con MIRN MONTO : US$ 9,112,500.00 OBJETO : Sumin. const. y mont. de la Interc. Masaya - S.Rafael Sur y S E Asoc. GARANTIA El Gobierno a través del MIRN	PLAZO DE CANCELACION : 10 años PERIODO DE GRACIA : 2 años, incluidos en plazo NUMERO DE CUOTAS : 16 – Semestrales PAGO PRIMERA CUOTA : Noviembre 15, 1997 PAGO ULTIMA CUOTA : Mayo 15, 2005 CUOTA DE AMORTIZACION : US$ 569,531.25.00	INTERESES CORRIENTES : 7.35 % COMISION DE COMPROMISO: -0- COMISION DE GESTION : 0.625 % S/CR GTOS. SUPERV. Y CONTROL : -0- INTERESES MORATORIOS : 6.00% + 1% INTERESES A PAGAR : US$ 3,020,879.81	PLAZO DE CANCELACION : 10 años PERIODO DE GRACIA : 2 años, incluidos en plazo NUMERO DE CUOTAS : 16 – Semestrales PAGO PRIMERA CUOTA : Noviembre 15, 1997 PAGO ULTIMA CUOTA : Mayo 15, 2005 CUOTA DE AMORTIZACION : US$ 569,531.25.00	INTERESES CORRIENTES : 7.35 % COMISION DE COMPROMISO: -0- COMISION DE GESTION : 0.625 % S/CR GTOS. SUPERV. Y CONTROL : -0- Este convenio es INTERESES MORATORIOS : 7.35%+ 1% BANCO – ENEL INTERESES A PAGAR : US$ 3,020,879.81

Anexo II

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EMPRESA NICARAGUENSE DE ENERGIA
SALDOS DE OBLIGACIONES CON EL MIFIN
POR PRESTAMOS OTORGADOS Y ESCRITURADOS
SALDOS AL 31 DE DICIEMBRE DE 1995

Ref.: Carta DF-0153-96

ORGANISMOS	MONTOS CONTRACT. DOLARES	OBJETO DEL PRESTAMO	MONTOS DESEMBOLSADOS CORDOBAS	MONTOS DESEMBOLSADOS DOLARES	PLAZOS	INTERES
BLOQUE "A"						
FAD – ICO (ESPAÑA)	7,500,000.00	AMPL. MEJ. AL SIST. DE TRANSMI. ELECT.	59,738,250.00	7,500,000.00	25 años, 5 de gracia	5%
FAD – ICO (ESPAÑA)	9,112,500.00	AMPL. MEJ. AL SIST. DE TRANSMI. ELECT.	30,466,200.68	3,824,961.48	25 años, 5 de gracia	5%
KFW–F. I (DM 10,0 MILL.)	6,230,530.00	REHAB. SIST. DISTRIB. ELECT.	30,433,188.69	3,820,816.90	20 años, 4 de gracia	6%
KFW–F.II (M 15.0 MILL.)	9,651,888.55	REHAB. SIST. DISTRIB. ELECT.	2,724,582.89	342,065.12	20 años, 5 de gracia	6%
BID #672/SFNI	19,000,000.00	REHAB. SIST. ELECT.	88,934,170.40	11,165,480.71	30 años, 10 de gracia	7.5%
TOTAL BLOQUE "A"	51,494,918.55		212,296,392.66	26,653,324.21		

PUNTOS REQUERIDOS

1) – Préstamos ya escriturados. Se pide que se trasladen a ENEL en los mismos términos y condiciones que fueron otorgados al gobierno.

2) – Se está requiriendo el envío de una tabla de los desembolsos ocurridos a la fecha, a fin de determinar el monto exacto de los intereses en deber.

3) – En el caso de los préstamos totalmente desembolsados, se requiere también el suministro de una tabla de amortización con los respectivos intereses.

4) – Se hace necesario la elaboración y suscripción de nuevos addendums a los convenios de pago Gobierno–Enel, donde se establezcan amplia y claramente todos los términos y condiciones con que ENEL deberá pagar los préstamos. Aquéllos donde las condiciones no se muestren de una forma clara.

ANEXO 1

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EMPRESA NICARAGUENSE DE ENERGIA
SALDOS DE OBLIGACIONES CON EL MIFIN
POR PRESTAMOS OTORGADOS Y ESCRITURADOS
SALDOS AL 31 DE DICIEMBRE DE 1995

Ref.: Carta DF-0153-96

ORGANISMOS	MONTOS CONTRACT. DOLARES	OBJETO DEL PRESTAMO	MONTOS DESEMBOLSADOS CORDOBAS	MONTOS DESEMBOLSADOS DOLARES	PLAZOS	INTERES
BLOQUE "B"						
BID #933/SFNI	13,921,000.00	BRECHA FINANCIERA 1994	106,602,534.28	13,383,703.19	25 años, 10 de grada	1%-2%
BCIE (FCIE #4-0253-0)	9,800,000.00	REHAB. SISTEMA ELECTRICO	29,909,555.69	3,755,075.98	15 años, 3.5 de gracia	7.86%
FIV - (VENEZUELA)	13,320,000.00	HOYO MONTE GALAN - MOMOTOMBO	45,182,176.55	5,672,518.43	12 años, 3 de gracia	6%
* URSS	140,892.25	IMPORTACION DE MATERIALES	703,961.25	140,792.25	8 años, 2 de gracia	5%
TOTAL BLOQUE "B"	37,181,892.25		182,398,227.77	22,952,089.85		

*-Sin mantenimiento de valor T/C US$ 1.0 x C$ 5.0

PUNTOS REQUERIDOS

1) - Totalmente de acuerdo con los términos y condiciones, se pide un estado de cuenta de cada uno de ellos a fin de proceder a cancelarlos.

2) - Se está requiriendo el envío de una tabla de los desembolsos ocurridos a la fecha, a fin de determinar el monto exacto de los intereses en deber.

3) - En el caso de los préstamos totalmente desembolsados, se requiere también el suministro de una tabla de amortización con los respectivos intereses.

4) - Se hace necesario la elaboración y suscripción de nuevos addendums a los convenios de pago Gobierno-Enel, donde se establezcan amplia y claramente todos los términos y condiciones con que ENEL deberá pagar los préstamos. Aquéllos donde las condiciones no se muestren de una forma clara.

5) - Préstamo BID #933: el monto entregado es menor al monto escriturado.

6) - El préstamo del BCIE no tiene convenio de pago Gobierno-ENEL, donde se establezcan las condiciones de cancelación. Se convino en elaborarlo.

7) - FIV-Venezuela: El convenio de pago determina que los pagos deben efectuarse al BCN, sin embargo, éste banco no acepta esta condición. Debe firmarse convenio MIFIN-ENEL, donde se establezcan todas las condiciones en igual forma a como fueron dadas al Gobierno.

8) - URSS: Se aceptan las condiciones en que está escriturado, solo que se solicita la separación con respecto a la L/C con Finlandia.

Anexo II

EMPRESA NICARAGUENSE DE ENERGIA
SALDOS DE OBLIGACIONES CON EL MIFIN
POR DONACIONES PENDIENTES DE CERTIFICAR
SALDOS AL 31 DE DICIEMBRE DE 1995

Ref.: Carta DF-0128-96

ORGANISMOS	MONTOS CONTRACT. DOLARES	OBJETO DEL PRESTAMO	MONTOS DESEMBOLS. DOLARES	PLAZOS	INTERES
BLOQUE "A"					
GOBIERNO DE SUECIA	12,741,000.00	PRENIC (REHAB. PTA. NICARAGUA)	12,741,000.00		
GOBIERNO DE SUECIA	3,600,000.00	PROYECTOS HIDROELECTRICOS	3,600,000.00		
GOBIERNO DE CANADA	9,388,600.00	REHABILITACION ENERGETICA	9,388,600.00		
GOBIERNO DE ITALIA	3,200,000.00	PLANTA DESALINADORA	3,200,000.00		
P. REC. BLUEFIELDS-RAMA	5,000,000.00		5,000,000.00		
TOTAL BLOQUE "A"	33,929,600.00		33,929,600.00		

PUNTOS REQUERIDOS

1) – Resolución Ministerial, certificando que las donaciones fueron trasladadas por el Gobierno Central, a la nueva Empresa, en carácter de capitalización.

ANEXO II

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EMPRESA NICARAGUENSE DE ENERGIA
SALDOS DE OBLIGACIONES CON EL MIFIN
POR DONACIONES PENDIENTES DE CERTIFICAR
SALDOS AL 31 DE DICIEMBRE DE 1995

Ref.: Carta DF–0128–96

ORGANISMOS	MONTOS CONTRACT. DOLARES	OBJETO DEL PRESTAMO	MONTOS DESEMBOLS. DOLARES	PLAZOS	INTERES
BLOQUE "B"					
GOBIERNO DE AUSTRIA	2,600,000.00	AMP. MEJ. SIST. TRAN. (PROY. S. E. SUR II)	2,600,000.00	Sin condiciones definidas	–
GOBIERNO DE DINAMARCA	14,739,500.00	REHAB. PMA, UNIDAD #3	14,739,500.00	Idem	–
GOBIERNO DE SUIZA	2,800,000.00	REHAB. PTA. CHINAND.–TURBINA DE GAS	2,800,000.00	Idem	–
GOBIERNO DE FINLANDIA	2,707,900.00	PMA WARTSILA, UNIDAD #4	2,707,900.00	20 años, 5 de gracia.	5%
TOTAL BLOQUE "B"	22,847,400.00		22,847,400.00		

PUNTOS REQUERIDOS

1) – No se encuentran amparadas por ningún tipo de documento que indique la forma que se están entregando estos fondos.

2) – Se pide que estos fondos sean considerados en concepto de donación, igual a los del grupo "A".

3) – Si no resultase posible conseguirlos como donación, solicitar su cancelación en términos sumamente blandos: Treinta años de plazo, diez de gracia y con una tasa del 2% para el período de gracia y 4% para el período de cancelación.

Anexo II

EMPRESA NICARAGUENSE DE ENERGIA
SALDOS DE OBLIGACIONES CON EL MIFIN
POR DONACIONES PENDIENTES DE CERTIFICAR
SALDOS AL 31 DE DICIEMBRE DE 1995

Ref.: Carta DF-0128-96

ORGANISMOS	MONTOS CONTRACT. DOLARES	OBJETO DEL PRESTAMO	MONTOS DESEMBOLS. DOLARES	PLAZOS	INTERES
BLOQUE "C"					
GOBIERNO DE NORUEGA	673,400.00	AMP. MEJ. SIST. TRANSM. (TRANSFOR.)	673,400.00	3 años, 1 de gracia.	5%
* GOBIERNO DE FINLANDIA	4,333,300.00	LINEA DE CREDITO, IMPORT. MATERIALES	4,333,300.00	8 años, 2 de gracia.	5%
TOTAL BLOQUE "C"	5,006,700.00		5,006,700.00		

*-Sin mantenimiento de valor T/C US$ 1.0 x C$ 5.0

PUNTOS REQUERIDOS

1) – Se encuentran debidamente escrituradas, pero se piden las mismas condiciones del bloque "B", o sea, que se capitalicen o bien en condiciones de pago sumamente blandos.

ANEXO III

EMPRESA NICARAGUENSE DE ELECTRICIDAD (ENEL)

AMORTIZACION DEUDA A LARGO PLAZO

AÑO 1996 (según presupuesto)

OBLIGACIONES DIRECTAS		
AMORTIZACION		
Ansaldo (Italia)	C$4,235,800	
Banco de Santander (España)	8,017,700	C$12,253,500
INTERESES		
Ansaldo	2,390,100	
Banco de Santander	3,595,400	
Banco de Santander	1,557,400	7,542,900
		19,796,400
OBLIGACIONES A TRAVES DEL MIFIN		
AMORTIZACION		
Fondo de Inversiones de Venezuela		7,725,100
INTERESES		
BCIE	4,260,600	
Fondo de Inversiones de Venezuela	6,995,300	
KFW-Alemania-F-I	3,821,700	
KFW-Alemania-F-II	1,533,200	
BID No. 872	4,443,100	
BID No. 933	1,707,000	
ICO-FAD-España	3,191,400	
ICO-FAD-España	2,294,100	28,246,400
		35,971,500
GRAN TOTAL DEUDA		C$55,767,900

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