

行政院及所屬各機關出國報告

(出國類別：考察)

考察大企業物流整合與管理之運作實務

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一、前言

材料供應成本素居經營成本之首，公司於面臨自由化與民營化等經營環境變遷之下，材料管理績效之良窳將首當其衝接受考驗。本處近年來除積極推動作業再造以提昇管理績效外，為有效整合公司資源及提昇營運績效，亦就物流、採購、管控三大系統研議材料管理體系未來發展方向。

就物流部分之資源整合，本處已規劃興建北中南物流倉庫，其中中部(后里)倉庫已辦理工程發包中，該倉庫係本公司首座大型自動化倉庫，民營化後將伺機轉型為獨立營運之物流中心，擬藉由此次洽訪，以了解國外企業物流系統之運作方式及未來發展趨勢，以擷其經驗及制度可資借鏡之處，作為規劃相關制度之參考。

另為提昇公司備品管理績效及採購效率，本處刻正規劃外購備品統購合約制度，該制度影響範圍將涵括採購與存控管理，此次洽訪另一重點即與本公司主要備品供應商（GE、Siemens-Westinghouse）就該制度存控面之規劃方向、合約條款與執行細節等進行溝通。

二、出國行程

<u>日期</u>	<u>考察地點</u>	<u>工作內容</u>
89.12.11-89.12.11	-	往程
89.12.12- 89.12.13	GENE	洽訪備品實體分配系統及就備品統購合約制度存控面之規劃、合約條款與執行細節進行溝通
89.12.14- 89.12.16	GEEPI	洽訪電子商務於物流體系之運作實務及就備品統購合約制度存控面之規劃、合約條款與執行細節進行溝通
89.12.17- 89.12.18	Siemens -Westinghouse	洽訪備品實體分配系統及就備品統購合約制度存控面之規劃、合約條款與執行細節進行溝通
89.12.17- 89.12.18	--	返程

三、統購契約制度規劃概述

本公司各電廠機組設備維修備品必需向原設備供應廠商（以下簡稱原廠）採購者，目前均由電廠各部門依備品使用狀況、庫存量及大修時程隨時開立請購單送交材料處辦理外購手續。鑑於此個案採購方式常因採購案件分散、件數繁多且採購量零星及採購程序繁瑣等因素致本公司無取得議價優勢，各單位更因領前時間冗長、不穩定，請購備品時往往多購、早購，除導致大量庫存外且無法滿足大修期間之緊急備品需求。基此，本處乃由存管課與外購課共同規劃「外購備品統購契約制度」，藉由彈性調整交貨數量及時程以降低庫存成本，並透過統籌採購以簡化作業，更期藉此推行採購電子化並為公司民營化後之策略性供應商制度奠基。

本制度構想如下：

- (一) 適用對象：本公司各電廠原有機組設備之後續維修、零配件供應、更換或擴充，必須向原供應廠商以限制性招標方式採購者均適用之。
- (二) 合約內容：「外購備品統購合約」包括合約條款與合約清單（依電廠別分列），其中合約條款為定稿，合約清單則逐年更新。
- (三) 合約清單：合約清單原則上係涵括各電廠全年備品採購量，其內容概分為「固定」與「選購」二類。其中「選購」類得彈性調整交貨項目、數量及交貨期，以機動配合用料及合理抑低配件庫存。未列入合約清

單之項目，則援用一般購案方式辦理。

1. 固定：採購項目、數量及裝運日期已確定，合約執行期間原廠將依約逕行交貨。

2. 選購：

(1) 採購項目、數量及裝運日期尚未確定，惟請購部門需先預估採購項目及數量，俟確定用料需求時再另行通知材料處轉洽原廠交運。

(2) 選購類採購數量得增購百分之五十，合約清單效期屆滿尚未通知交運者即視同取消採購。

(四) 作業簡化：除以統籌採購取代逐案辦理外，另擬以定期 T/T 付款取代逐案開發 L/C，並簡化履約保證金繳交作業。

(五) 採購電子化：透過電子商務進行相關作業，以提昇效率。

鑑於統購作業影響層面遍及全公司各電廠及主要供應廠商且資訊系統亦需配合開發，故作業初期先由核一廠、核二廠、核三廠、通霄電廠及台中電廠先行試辦，供應廠商則選定積極推展電子商務之美商奇異公司 POWER SYSTEM、NUCLEAR ENERGY 兩部門配合辦理，俟試辦一年後再檢討成效及相關制度並據以開發資訊系統，以俟機推廣全公司適用。

「外購備品統購合約」制度係整合各電廠全年度需求一次採購，為提昇該預估需求之完整性，故制度設計上增加原廠建議清單。另為機動配合用料需求之變化，合約清單增列選購類，其餘作業流程原則上與一般採購無異，詳如下表：

作業程序	差異比較	
	一般採購	統 購
通知提供建議清單	無	通知原廠
分送建議清單	無	分送各電廠
請購	逐案請購	材料部門彙總
覆核請購	逐案辦理	彙總辦理
詢價		
報價		
送審		
核標		
通知監會辦	相 同	
決標		
製作契約		
履約保證金	逐案發還	延續使用
交貨	依約逕行交貨	「固定類」依約逕行交貨，「選購類」確定用料後通知交貨
付款	L/C 付款	定期電匯
提貨驗收	逐案辦理	彙總辦理
驗收		
索賠	相 同	
結案		

四、 考察內容

鑒於採購電子化為必然之趨勢，統購契約規劃之初即以發展電子商務為主要目

標之一，基此，選定積極發展電子商務之 GE 公司為試辦對象，惟該制度係兼顧採購面與存控面之績效提昇，如前節所述，採購項目將新增「選購類」，即本公司可根據用料需求，彈性調整交貨期與交貨數量，因此，所涉及之合約條款勢必複雜化。

統購契約制度係自 89 年 3 月起規劃，其中就合約條款部分與 GE 公司亞洲地區法務人員前後計開會溝通三次，惟就主要條款諸如 Warranty、Liability 等無法取得共識，另該公司網站備品部分(Parts Edge)功能無法滿足本公司需求，本次出國重點即就契約條款、作業細節與電子商務發展性等與原廠 GE 公司進行溝通，另 Siemens-Westinghouse 亦為本公司主要備品供應商之一，惟該公司尚未發展電子商務，故亦列為洽訪對象，以了解未來洽其簽訂統購契約可行性。

4.1 GENE

座落於加州 San Jose 的 GE 公司核能部門 (GENE)，外表觀之頗為簡樸，入口處貼滿各年度優秀工程師照片，其中不乏亞裔人士，頗令人印象深刻。

就 GENE 而言，由於本公司草擬之統購契約條款係以其 Form 245 為基礎訂定，故條款部分僅做小部分文字修改，並無重大之意見歧異。

GENE 就選購品價格之效期考量甚多，據其解釋係因核能市場已日趨式微，部分下包之零件製造商無法提供長達約一年之報價效期，甚而零件不再生產製造亦時有所聞，經研議修改部分文字，另 GENE 亦同意本公司於貨到後

定期以 T/T 付款及定期交運（每月交貨一次），以簡化作業程序。

4.2 GEEPI

GEEPI 位於亞特蘭大市，為 GE 公司電力部門，此次洽訪共計開會二天，場所係位於該公司 Main Building 一樓，該樓層規劃為多間會議室及大廳，會議室之精緻與設備現代化頗令人印象深刻，二天議程中，該公司分別派出法務、商務、資訊相關人員進行洽商。

經開會結果，除對統購契約條款逐條研議外，該公司原本堅持之重要商務條款，例如 Warranty、Liability 等亦獲致共識，應係此行最有收穫之處。

GE 公司積極進行多角化經營，曾多次獲選最具聲望之公司，其事業涵括 Aircraft Engines、Appliances、Industrial Systems、Medical Systems、Plastics、Transportation Systems、Capital Services、Lighting、NBC 及 Power Systems。近年來更致力於發展國際化與電子商務。

為有效加強備品管理，GE 公司前已於公司網站中開發 Parts edge 專區，該 Parts edge 原係委外開發，惟因未能符合顧客需求，故目前已由該公司資訊人員自行修訂，以使用戶自行查閱所需備品庫存、報價及交貨現況。此次洽訪該公司除詳盡介紹各項系統功能外，亦同意將盡量配合本公司統購契約之作業與管理功能需

求，做部分更正。

4.3 Siemens-Westinghouse

Westinghouse 原係本公司最主要備品供應商之一，備品供應均係透過其在美供應商(Federal Eastern Co.FEC)辦理，近年來該商已為 Siemens 併購並改稱 Siemens-Westinghouse，備品供應則仍由 FEC 辦理。

Siemens-Westinghouse 位於奧蘭多市，建地甚廣，各棟建築之間有定時交通車往返，整個區域恰似一座公園，林木蒼鬱，頗令人艷羨。惟進入辦公室區，卻隱隱約約覺得該公司似乎缺乏 GE 公司所具備之積極明朗特質，不知是否我過於敏感，或與該公司被併購有關。

Siemens-Westinghouse 對各機組之備品僅備”Illustrated Parts Book”電子檔，惟電子商務則尚未起步。

會議中雙方就統購契約之內容與執行方式先行溝通，至未來簽訂之可行性與執行細節該商希望先透過 FEC 處理。

五、心得與建議

本處此次規劃「外購備品統購契約」制度，其著眼點除提昇採購效率，及因應因退離不補所致之人力不足外，亦期藉由彈性交貨俾益於專用配件之管理。

本公司專用配件約計 14 萬筆，目前庫存之帳面價值（尚未攤提折舊）高達 174 億，其中超過十年以上未動用者竟佔四成六，至十五年以上則佔 28%，詳如下表。

總筆數	139,587
十年以上未動用（含 15 年以上）	64,681 (46%)
十五年以上未動用	39,565 (28%)

專用配件庫存高居不下，究其原因應為：

- （一）工程單位移交：工程單位購置機組時，往往依據合約所列廠商推薦備品清單購置，自易導致多購。復於 86 年訂定「專用配件管理要點」，明訂工程單位僅限購置前二年營運所需之消耗性配件。
- （二）囿於機組採購需採公開招標之限制，導致各電廠機組廠牌型式眾多，配件無法通用，嚴重影響其流通性。
- （三）採購領前時間冗長，易致單位多購早購，庫存增加。

(四) 部分主設備已報廢但零件未隨之報廢。

為有效抑低專用配件庫存，建議如下：

- (一) 久未動用器材清查：依據久未動用年限及金額高低訂定清查計劃逐批辦理，尚可使用者應優先設計使用並予管控追蹤，至無法或不再使用者，則予報廢報呆，以免積壓庫存徒增管理成本。
- (二) 專用配件基本資料檔整理：含配件編號及原廠 P/N 之確認，並研討就新購配件增加必要資料欄位（例如使用年限）以有效管控。
- (三) 主設備已報廢，配件尚未隨之報廢之處理。
- (四) 建廠或新建機組前二年所需營運配件應建立確實管控機制。
- (五) 以購領比率確實查核配件採購之合宜性。
- (六) 強化專用配件系統管理功能。
- (七) 建立與國外其他電廠零件流用管道。
- (八) 就主要供應商推行統購契約制度，以增加備品採購之靈活度，避免多購、早購。

統購契約制度自 89 年 3 月草擬制度迄今已近一年，並已奉核先行試辦，期間歷經多次正式座談會、說明會，至於非正式溝通更是不計其數。無可諱言的，制度之規劃並無想像中的困難，與廠商洽商也堪稱

順利，但公司內部之溝通因涉及甚多單位，及同仁於被要求改變現有作業方式時往往會產生疑惑與抗拒，所遭遇之瓶頸與壓力實非局外人所能想像，期間亦經歷難以言喻之挫折與沮喪，幸運的是長官對本案完全的授權與支持，以及規劃小組三位主要成員有著共同理想與傻勁，互相激勵、打氣，抱持著必要完成之決心與自我期許。一路走來，那份相濡以沫的情誼，彌足珍惜。

目前規劃工作已近尾聲，GENE 及 GEEPI 之統購契約亦應可於近期內簽訂，但要全面推廣還有一段很長的路，仍需努力的重點為：

- (一) 運用網路建立電子化採購資訊系統
- (二) 作業流程與內部授權之重新研討、修訂
- (三) 簽約對象應否僅限原廠或授權代理之研議

外購備品統購契約目前雖僅踏出了一小步，但就材料採購作業及備品管理而言，無論在觀念上或是做法上，這一小步所代表的意義必將影響深遠。對我個人而言，又是何其有幸參與，且深深感受到那份屬於成就感的歡愉。



CONTRACT BETWEEN
TAIWAN POWER COMPANY
And
GE ENERGY PARTS, INC.
FOR
PARTS and EQUIPMENT SUPPLY

DRAFT VERSION

REVISION 3

Nov 27, 2000

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THIS Contract (the "Contract") dated _____, is entered into by and between:

- (1) Taiwan Power Company (the "Buyer" "Purchaser" or "TPC"), a corporation organized and existing under the laws of Republic of China and having a place of business at 242, Roosevelt Road, Sec. 3, Taipei, Taiwan; and
- (2) GE Energy Parts, Inc. (the "Seller" or "GEEPI"), a corporation organized and existing under the laws of United States, with a place of business at 4200 Wildwood Parkway, Atlanta, GA 3033, USA. (Buyer and Seller are referred to individually herein as a "Party" and collectively as the "Parties").

NOW, THEREFORE in consideration of the mutual promises stated herein, the parties agree as follows:

1. GENERAL

- 1.1 As one of the best customers in the region, GEEPI agrees to provide Taiwan Power Company for the supply of Parts and Equipment. With this long-term Contract, GEEPI will provide TPC high quality Parts and Equipment and endeavor to do so with compatible prices and superior delivery schedules.
- 1.2 Parts and Equipment provided under this Contract shall be governed by the terms and conditions contained herein and Taiwan Power Company's "General Terms and Conditions for the Supply of Equipment for Nuclear Power Stations", Form No. 245(TPC-KS-CH) Rev. 4, 1 Sept. 1987 ("Form 245(TPC-KS-CH) Rev. 4"). Except as provided in Article 1.3 below, the terms of this Contract shall prevail in the event of any contradiction or inconsistency between this Contract and Form 245(TPC-KS-CH) Rev. 4.

2. SCOPE OF SUPPLY

Under this Contract, the scope of supply shall be the provision of parts and equipment, material, supplies, products, components or other goods specified in Attachment 1 relevant for the operation and maintenance of the TPC GE turbine-generator fleet ("Parts and Equipment") on an annual basis. The Parts and Equipment comprise two categories being Fixed Items and Optional Items with itemized quantity, price and shipment schedule detailed in the Contract Price List for the specified year ("Effective Year"). Unless otherwise agreed by both Parties in writing, the Contract Price List shall be renewed annually with revised items, quantity, price and shipment schedule for each succeeding Effective Year. Seller shall submit by each August 31 a proposed Contract Price List for the succeeding Effective Year in the form of Attachment 1. The proposed Contract Price List is first suggested by GEEPI and will be confirmed after a thorough review and price negotiation by Buyer and Seller, as described in Article 3.

2.1 Fixed Items

The Fixed Items category of supply is the Parts and Equipment grouped as Category F in the Contract Price List ("Fixed Items"). The Fixed Items shall be firm orders for delivery at the price, quantity and shipment schedule as indicated in the Contract Price List. No

further confirmation, notification or reminder is required prior to delivery if delivered in accordance with Article 5.

2.2 Optional Items

The Optional Items category of supply is the optional Parts and Equipment grouped as Category O in the Contract Price List ("Optional Items"). The Optional Items is an optional list of items for TPC for the specified delivery year and may not be required at TPC's sole discretion. The agreed quantities and lead-time as indicated in the Contract Price List for the Optional Items are adjustable. Buyer shall send a Notice of Delivery with requested quantity and ship date to Seller by December 31 of the Effective Year in which the Optional Items are provided in the Contract Price List. Upon receipt of the Notice of Delivery, Seller shall reconfirm with Buyer within fifteen (15) days from the date of the Notice of Delivery, by sending a written notification to Buyer if the requested quantity and ship date is acceptable ("Notification of Acceptance"). Once confirmed by Seller's written Notification of Acceptance, the Buyer's Notice of Delivery and Seller's Notification of Acceptance shall constitute a part of the Contract documents. Any Optional Items provided in the Contract Price List and not requested by Buyer prior to December 31 of the Effective Year shall be deemed as not to be required by Buyer and therefore, subject to automatic cancellation with no further notice or obligation from TPC.

3. SCHEDULE FOR PREPARATION AND SUBMISSION OF ANNUAL SCOPE OF SUPPLY

- 3.1 Seller shall provide a proposed Contract Price List in the format as Attachment 1 for TPC's reference by each August 31 for the next succeeding Effective Year. The proposed Contract Price List shall be quoted on a firm-price basis and prepared separately for each Power Plant's need. Unless otherwise agreed, all prices for each item shall be quoted on FOB (by sea) or FCA (by air) basis in accordance with INCOTERMS 2000. The proposed Contract Price List shall have a validity period of at least four months from the date of submission by GEEPI but not later than December 31 of the year in which the proposal is submitted.
- 3.2 Upon reviewing of the proposed Contract Price List, TPC may request clarification and determine the Parts and Equipment required at its own discretion. When the Contract Price List is accepted, the Contract Price List shall be categorized into two segments defined as Fixed Items and Optional Items. All items listed as Fixed Items and Optional Items in the Contract Price List constitute the base scope of this Contract for which the final Contract price will be reviewed and negotiated as described in Article 4.

4. PRICE REVIEW, NEGOTIATION AND AWARDING

- 4.1 Price review and negotiation shall take place immediately after proposal submittal. Both Parties agree to work diligently with the intent to complete the price review, and negotiation such that the Contract Price List for each Effective Year can be awarded prior to the start of the Effective Year... A Notice of Award referencing the Contract Price List

for the Effective Year, the agreed Total Fixed Item Price and Total Optional Item Price issued by TPC and counter-signed by the Seller to acknowledge acceptance shall constitute as renewal of this entire Contract and TPC's signed acceptance of the agreed Contract Price List for the Effective Year shall constitute as an addendum to the Contract.

- 4.2 Unless otherwise requested by Purchaser, the Price Negotiation Meeting and the Contract Awarding shall be conducted in accordance with the Purchasing Law of the Republic of China.

5. DELIVERY, SHIPPING DOCUMENTS AND PACKING

- 5.1 For the Fixed Items of 2.1, Seller shall deliver all items in accordance with the shipment schedule shown in Attachment 1 the Contract Price List for the Effective Year.
- 5.2 For Optional Items of 2.2, Seller shall deliver the items upon the dates in accordance with Notice of Delivery if confirmed by Seller's Notification of Acceptance.
- 5.3 Shipment may be made in advance of the delivery schedule in accordance with 5.1 and 5.2. However, in no event, shall any shipments be made more than two (2) months in advance without TPC's written approval/request.
- 5.4 Seller agrees to use its best effort to minimize the number of shipments and where possible, to consolidate the shipments for delivery on the last week of every month.
- 5.5 Under separate packing for each individual power plant, Seller shall provide a Master Shipping Document including bill of lading (or airway bill), commercial invoice, and packing list. In addition, a complete set of detailed invoices and packing lists and required certifications compiled for each power plant shall also be provided together with the master shipping documents at time of delivery.

6. LIQUIDATED DAMAGES

In the event of delay in delivery of Parts and Equipment for any reason not excused, Seller shall, as liquidated damages and not as a penalty, pay to Purchaser at a rate of one-tenth of one percent (0.1%) per day of that portion of the delivered Parts and Equipment price attributable to the delayed Parts and Equipment. Purchaser provides 30 days of grace period. Seller shall pay the liquidated damages calculated from the first day of delay in case the delay is beyond 30 days. In no event shall the total liquidated damages payable by Seller to Purchaser under this provision exceed seven percent (7%) of the price of such delayed Parts and Equipment. Purchaser may make a deduction as settlement of the liquidated damage for the delayed Parts and Equipment when making payment for said delayed Parts and Equipment, provided a detailed calculation of the deduction for the liquidation damages is furnished to Seller on or before the time when the deduction is made. Payment of liquidated damages, as herein provided shall be Purchaser's sole remedy for delays due to causes for which Seller is responsible under this Contract.

7. PAYMENT

- 7.1 Unless otherwise provided in the Contract Price List for the Effective Year, payment shall be made in US Dollars by irrevocable Letters of Credit issued for sight draft upon presentation of required shipping documents. All banking fee outside of Taiwan shall be for Beneficiary account. The LOC shall remain in effective until thirty (30) days after the scheduled Parts and Equipment shipment. The LOC may be in the form of a revolving LOC in which case, it shall be replenished with sufficient funds ninety days in advance of each scheduled Parts and Equipment shipment and shall remain in effective until thirty (30) days after the last scheduled Parts and Equipment shipment. Buyer will increase the amount(s) and /or extend the validity periods(s) and make such appropriate modifications to any LOC within thirty (30) days of Seller's notification that such is necessary to provide for payments to become due.
- 7.2. All taxes occurring outside R.O.C. shall be Seller's responsibility. All taxes in the R.O.C. shall be for Purchaser's account.

8. PERFORMANCE BOND

- 8.1 Except as otherwise mutually agreed, Seller shall issue a standing performance bond equal to five percent (5%) of the Total Fixed Item Price plus 2.5% of the total price of Total Optional Item Price ("Performance Bond") in the form of a Standby Letter of Credit ("SBLC") within 30 days after Seller's acceptance of the Notice of Award
- 8.2 The Performance Bond shall be established per Attachment 2 of this proposal and issued or advised by a bank or a branch of a bank located in Taiwan. The expiry date of the Performance Bond shall be 30 days after the last Fixed Item shipment date as specified in the Contract Price List for the Effective Year. If any Item(s) is delivered after the expiry date of the Performance Bond, such item(s) shall automatically be covered by the succeeding year's Performance Bond to be issued within 30 days of Seller's acceptance of the Notice of Award for the Contract Price List for the succeeding Effective Year. If the succeeding year's Performance Bond is not issued prior to the expiration of the current Performance Bond, an extension of the expiry date to 30 days after the actual last shipment date is required.
- 8.3 In the event Seller fails to perform its Contract obligation in whole or in part, the Purchaser, at its sole discretion, may draw down on said Performance Bond up to amounts equal to the appropriate value for settling the nonconformity, but not to exceed the value paid for the non conformed Part and Equipment.
- 8.4 Prior to each draw down, Purchaser must provide written notification to Seller detailing Seller's nonconformity and Purchaser's intent to draw down if such nonconformity is not

corrected by Seller within thirty (30) days of said notification.

9. DUTIES, TARIFFS AND TAXES

Purchaser shall be responsible for the payment of import taxes, duties, tariffs, fees and other charges imposed by the government of Taiwan, R.O.C. for importation of Parts and Equipment supplied under this Contract regardless of whether the applicable laws and regulations name Purchaser or Seller as the payer.

10. TITLE TRANSFER, RISK OF LOSS, STORAGE

Title to Parts and to be shipped from the United States of America shall pass from Seller to Purchaser immediately after each item departs from the territorial land, seas and overlying airspace of the United States. For this purpose, the Parties acknowledge that the territorial seas of the United States extend to twelve nautical miles from the baseline of the country determined in accordance with the 1982 United Nations Convention of the Law of the Sea. Title to Equipment to be shipped from Seller's country and title to Parts and Equipment to be shipped from within the country where the Parts and Equipment will be installed shall pass to the Purchaser when made available for shipment from the manufacturer's factory. Title to Parts and Equipment to be shipped from a country other than Seller's country of origin or the country of installation shall pass to the Purchaser at the port of export immediately after the Parts and Equipment have been cleared for export. Notwithstanding passage of title, Seller shall remain responsible for risk of loss to all Parts and Equipment until delivered pursuant to Article 5.

11. WARRANTY

- 11.1 Seller's warranty obligation (except with respect to title) for Parts and Equipment shall apply to defects which appear within twelve (12) months from the date of delivery of such Parts and Equipment (the "Warranty Period").
- 11.2 "Seller does not warrant the Parts and Equipment or any repaired or replacement parts against normal wear and tear including that due to environment or operation, including excessive operation at peak capability, frequent starting, type of fuel, detrimental air inlet conditions or erosion, corrosion or material deposits from fluids or which has been involved in an accident. The warranties and remedies set forth herein are further conditioned upon (1) the proper storage, installation, operation, and maintenance of the Parts and Equipment and conformance with the operation instruction manuals (including revisions thereto) provided by Seller and/or its subcontractors, as applicable and (2) repair or modification pursuant to Seller's instruction or approval."

12. ELECTRONIC TRANSACTIONS

In order to improve the efficiency of procurement process, Purchaser and Seller agree to make necessary preparations for the electronic transaction (BtoB E-Business) in the future. Under this concept, Purchaser will be able to use Seller's specific web site to obtain the latest proposed Contract Price List, current shipping status and the latest pricing and shipment schedule for the Optional Items and place its order directly through Seller's web site.

13. EXPORT CONTROL

- 13.1 All items sold or licensed hereunder shall at all times be subject to the export control laws and regulations of the United States of America. Purchaser agrees that no U.S. origin Parts and Equipment furnished by Seller, or any product thereof, shall be re-exported by Purchaser or its authorized transferees, if any, directly or indirectly from Taiwan unless explicitly permitted in writing by Seller in accordance with U.S. export control laws and regulations. The aforesaid obligations shall survive any satisfaction, expiration, termination or discharge of any other contract obligations.
- 13.2 The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Contract.

15. OTHERS

- 15.1 Seller may assign or novate its rights and obligations regarding the Parts and Equipment, in part or in whole, to one or more of its wholly owned subsidiaries upon written notice to Purchaser setting forth the effective date of such assignment or novation. Upon the effective date of such assignment or novation, all of the rights and obligations of Seller under this Contract shall vest solely in Seller's subsidiaries. Purchaser agrees to execute such documents as may be necessary to effect the assignment or novation. Seller guarantees the performance of its subsidiaries after the assignment or novation takes effect. The delegation or assignment by Purchaser of any or all of its duties or rights under this order without Seller's prior written consent shall be void.
- 15.2 This Contract represents the entire agreement between the Parties and no modification, amendment, rescission, waiver or other change shall be binding on either Party unless assented to in writing by the Parties' authorized representatives. Any oral or written representation, warranty, course of dealing or trade usage not contained or reference herein shall not be binding on either party. Each Party agrees that it has not relied on, or been induced by, any representations of the other Party not contained in this contract.
- 15.3 The invalidity in whole or in part of any part of this Contract shall not affect the validity of the remainder of the Contract.

15.4 As used in this instrument, "Parts and Equipment" means all equipment, parts, materials, supplies, products, components, and other goods that Seller has contracted to supply to Purchaser.

ATTACHMENT 1

Contract Price List for the Effective Year _____

Category / List Item	GEEPE Item No	SECTION	GEEPE/P/N	DESCRIPTION	QTY (Note 1)	UNIT PRICE (US\$/FOB)	SUBTOTAL	SAFETY CLASS (N/Q/Ded)	Nominal Lead Time				

SAFETY CLASS:
 N: Non-nuclear safely related
 Q: Nuclear safely related
 Ded: Dedicated to nuclear safely related

Note 1: Quantities with an * reflect minimum order quantity

PROPOSAL BY GE ENERGY PARTS, INC.:

ACCEPTANCE BY TAIWAN POWER COMPANY:

Signature _____
 NAME: _____
 TITLE: _____

Signature _____
 NAME: _____
 TITLE: _____

Date _____

Date _____

外購備品統購契約作業程序

89.10.14.

Rev.1

壹、統購契約：

為提昇本公司外購備品採購效率，以統籌各電廠全年購案方式向同一國外原供應廠商（以下簡稱原廠）採購備品。

貳、適用範圍：

本公司各電廠原有機組設備之後續維修、零配件供應、更換或擴充，必須向原廠以限制性招標方式採購者均適用之。

參、契約內容：

外購備品統購契約效期為一年，其內容涵括契約條款與契約清單，其中契約條款規定買賣雙方權利義務關係，除經雙方協議修訂外，每年維持原條款。契約清單則依據電廠別分列，以載明各電廠採購項目明細，清單內容將逐年更新。

肆、採購類別：

統購契約採購項目分為「固定」及「選購」二類，分述如下：

一、固定：採購項目、數量及裝運日期均已確定，契約執行期間原廠將依約進行交貨。

二、選購：

(一) 採購項目、數量及裝運日期均未確定，契約所列為預估採購量，本公司得就各電廠選購類總金額增購 50%，契約清單效期屆滿（每年年底）尚未通知交運者即視同取消採購。

(二) 請購部門於提出統購清單時應先預估擬購項目及數量，俟確定用料需求時再另行通知材料處轉洽原廠交運。

(三) 材料處將透過企業內網路或逐月送交執行報表，俾利各電廠了解選購類執行現況。

伍、 文件傳遞

為縮短作業時程，統購契約之資料傳遞得以電子傳輸辦理，惟相關文件仍需另行寄送。

陸、 授權規定

一、電廠統購清單及驗收單依據各電廠原訂之請購單及驗收單授權規定辦理。

二、合約執行期間，選購類交運通知授權各相關部門主管辦理。

三、其餘事項仍依一般購案授權規定辦理。

柒、 臨時購案

合約執行期間，各電廠若有統購契約外之臨時需求須向原廠採購者，應另行提出個案請購單經授權主管核定並轉主管處覆核經呈授權主管核定後由材料處辦理採購手續。

捌、 作業表單

為提昇管理績效及建置契約管理系統，統購契約需使用下述特定表單：

一、建議清單：由原廠提出，以預估各電廠下年度所需備品，其內容涵括建議採購項目、數量及預估單價等，以為電廠提出請購及預估採購預算之參考，其格式如附件一。

二、統購清單：由各電廠用料部門提出，以彙總下年度所需備品採購量，並就原廠建議項目及新增項目分別填列，其格式如附件二、三。

三、統購備品呈核表：電廠材料部門彙集各部門統購清單後，應填列此表送呈授權主管核定，其格式如附件四。

四、採購清單：材料處於彙集各電廠統購清單後，需填列採購清單以送交原廠報價，其格式如附件五。。

五、契約清單：統購契約決標後，原廠需依據決標內容重繕採購清單，經本公

司認可簽約後，該重繕採購清單即為契約清單，其格式如附件六。

六、交運通知：選購類器材於確定用料需求後，各電廠用料部門需填列此表送交材料處，以憑通知原廠交貨，其格式如附件七。

玖、作業流程

一、原廠提供建議清單：

- (一) 通知：每年五月間由材料處通知原廠依本公司電廠別提供建議清單，並通知各電廠研議下年度擬購項目及數量。
- (二) 提供建議清單：原廠於六月間就各電廠次年度所需維護備品提供建議清單送交材料處。
- (三) 建議清單分送電廠：材料處將原廠建議清單整理成電廠統購清單底稿後，將原廠建議清單、電廠統購清單底稿及統購備品呈核表分送各電廠材料部門彙辦。

二、電廠提出統購需求：

- (一) 建議清單分送用料部門：電廠材料部門將材料處送交之原廠建議清單及統購清單底稿分送各用料部門。
- (二) 用料部門提出統購清單：各用料部門參考原廠建議清單並預估次年度擬購器材後就原廠建議及新增項目分別填列統購清單（預算金額應涵括固定類及以擬購數量計算之選購類總金額），該清單應於每年七月間提出。
- (三) 彙總統購清單：材料部門彙集全廠統購清單後，填註統購備品呈核表並送呈電廠授權主管核批。
- (四) 主管處覆核：各電廠統購清單由主管處覆核後並呈授權主管核定併同電子檔案送交材料處辦理採購事宜。

三、詢報價：

- (一) 成立統購購案：材料處依據採購清單格式彙總各單位統購清單後，呈授權主管核定並向原廠詢價。另為配合 PRMS(材料採購管理系統)作業，材料處應另行於 PRMS 成立新購案，彙總輸入各電廠統購資料。(以「驗收倉庫」區分電廠別，「選購」類器材之「希望裝運日期」欄則一律暫以次年年底填入 (XX/12/31))。
- (二) 報價：原廠就採購清單項目提出正式報價資料，並於填齊相關欄位後送交材料處。

四、審標

- (一) 報價資料送審：材料處收到報價資料後即先行審核報價是否完整及有無超預算，再簽送請購單位審核。報價超預算時，應洽請購單位表示是否追加預算訂購抑或減量後訂購。
- (二) 審標：各電廠就原廠報價資料審核，並將審標意見通知材料處。
- (三) 澄清及審標結果呈核：材料處彙總各電廠審標意見，如需澄清則洽原廠辦理。俟報價資料符合後，即簽擬決標意見陳核。

五、訂定底價：材料處參考廠商報價及以往購價資料，就固定與選購類合併擬訂底價並呈授權主管核定。

六、決標：

- (一) 材料處簽擬決標意見核批後即訂期辦理決標並通知相關單位監會辦。
- (二) 決標後廠商應依據減價結果重繕清單(除非本公司另有意見，原則上應依據減價比率攤減單價)，俾憑製作契約。

七、製作契約：

材料處依據減價後重繕清單製作契約清單，併同契約條款呈核後即予製作契約。契約正本由買賣雙方各執一份，副本則分送有關單位。

八、履約保證金

- (一) 原廠應依據契約條款規定繳交履約保證金。
- (二) 材料處審核履約保證金無誤後，應製作「保證品保管單」送交保管。

九、交貨

- (一) 為簡化作業，統購器材原則上由原廠於每月最後一週裝運。另為撙節費用，裝運方式原則上以船運為主。
- (二) 為便於各單位管控預算及辦理驗收，原廠裝運器材時應依電廠別分別裝箱及開立發票。
- (三) 「固定類」項目由原廠依約逕行交貨，「選購類」則由電廠考量原廠製程並於確定用料時，將項目、數量、希望裝運日期等相關資料以交運通知送交材料處。電廠之「希望交運日期」若較「原廠製程」為長，則據前者通知交貨。反之，則據原廠製程通知交貨，惟仍洽請原廠盡量配合用料。
- (四) 材料處於收到原廠裝運文件後，即製作裝運通知單及起運通知書，並分送相關單位，俾其辦理保險及報關提運。

十、提貨驗收

器材抵台時，由材料處辦理報關提運並分別送交各電廠，俾以驗收。

十一、付款

- (一) 原廠依據統購契約條款，定期開列付款清單。
- (二) 材料處於審核付款清單無誤後，辦理請款及電匯手續。

十二、索賠、結案：

- (一) 器材經驗收結果如有破損、漏失、短裝及規範不符、試驗不合格等情事，應辦理索賠，俟理楚方得結案。
- (二) 購案經結案、結帳並確認無其他待辦事項時，即辦理移卷存檔。

(附件二)

XX 電廠備品統購清單
(A. 原廠建議採購項目)

年度：
原廠別：
請購部門：
預算科目：
預算金額：

Item	TPC Code	P/N	Description	Unit	Proposed Qty	Proposed Unit Price	Qty	F/O	Shipping Schedule	Air/Vessel Q/R	Leadtime	Remarks

主管

覆核

經辦

- 填表說明：
1. 本表請就原廠建議項目篩選,擬購項目需填註相關欄位,不擬採購項目則僅需於請購量欄填註 0,其他欄位免填。
 2. 原廠建議項目外之新增項目請另填新增項目表。
 3. 各欄填寫說明已加註於欄名上,請將游標移至各該欄名位置,即可顯示註解。
 4. 原廠建議採購資料相關欄位均已設定保護,無法修改。
 5. 選購項目之請購量僅為預估量,合約執行期間得增購50%,裝運月份欄則不需填入。
 6. 統購合約原則上每月最後一週交貨,請就固定類項目填註希望裝運月份。
 7. 交貨方式原則上以海運為主。

(附件四)

XX 電廠統購備品呈核表

年度： 製造廠出口檢驗：Y

製造廠商：

預算幣別及金額：

預算單位代號：

預算科目代號：

資本/營運支出：

主管處

請購單位

審核部門：

材料部門：(彙總)

會計部門：

主管
覆核

經辦

主管

覆核

經辦

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統購呈核表

(附件七)

TAIWAN POWER COMPANY
Notice of Delivery
Manufacture:
Purchasing No.
Contract No.
Date:

C/Item	Item	TPC Code	P/N	Description	Unit	Qty	F/O	Shipping Schedule	Air/Vessel	Q/R	Remarks

