UNITED
NATIONS

S

Security Council

Distr.
GENERAL

S/AC.26/2002/12
20 June 2002

Original: ENGLISH

UNITED NATIONS
COMPENSATION COMMISSION
GOVERNING COUNCIL

REPORT AND RECOMMENDATIONS MADE BY THE PANEL OF COMMISSIONERS CONCERNING PART ONE OF THE SEVENTH INSTALMENT OF “E1” CLAIMS

CONTENTS

	Paragraphs	Page
Introduction	1 - 5	5
I. PROCEDURAL HISTORY OF THE CLAIM	6 - 17	6
II. LEGAL FRAMEWORK	18 - 22	8
A. Applicable law and criteria	18	8
B. Liability of Iraq	19 - 20	8
C. Evidentiary requirements	21 - 22	8
III. CLAIM OF KUWAIT NATIONAL PETROLEUM COMPANY (K.S.C.)	23 - 176	9
A. Introduction and preliminary findings	23 - 28	9
B. The claim for business interruption losses	29 - 32	11
1. Facts and contentions	33 - 50	13
(a) The refining units and LPG plant losses	33 - 44	13
(b) Local Marketing losses	45 - 50	15
2. Evidence presented in support of the claim for business interruption losses	51 - 52	16
3. Iraq’s response and oral proceedings	53 - 55	17
4. Methodology for computing refinery losses	56 - 59	18
5. Methodology for computing Local Marketing losses	60 - 61	18
6. Panel findings	62 - 79	19
7. Adjustments of estimated and actual expenses	80 - 86	23
8. Conclusions and recommendations	87	24
C. The claim for damage to plant and equipment	88 - 101	24
1. Facts and contentions	88 - 90	24
(a) The refining units' losses	91 - 96	25
(b) Local Marketing and Head Office losses	97 - 101	26
2. Evidence presented in support of the claim for damage to plant and equipment	102	27
3. Iraq’s response	103	27
4. Panel findings	104 - 112	28
5. Adjustments to plant and equipment	113 - 120	30
6. Conclusions and recommendations	121	31
D. The claim for tangible property losses	122 - 158	31
1. Facts and contentions	122 - 124	31
(a) Loss of equipment, surplus construction materials and inventory	125 - 132	32
(b) Loss of goods in transit	133 - 136	34
(c) Loss of cash	137 - 141	35
2. Evidence presented in support of the claim for tangible property losses	142	36
3. Iraq’s response	143	36
4. Panel findings	144 - 149	36
5. Adjustments to tangible property losses	150 - 157	37
6. Conclusions and recommendations	158	38
E. The claim for cost overruns	159 - 170	38
1. Facts and contentions	159 - 163	38
2. Evidence presented in support of the claim for cost overruns	164	39

3. Iraq's response	165	39
4. Panel findings	166 - 169	39
5. Conclusions and recommendations	170	40
F. The claim for bad debt losses	171 - 175	40
1. Facts and contentions	171 - 172	40
2. Panel findings	173 - 174	41
3. Conclusions and recommendations	175	41
G. Summary of Panel's recommendations	176	41
IV. INCIDENTAL ISSUES	177 - 184	42
A. Currency exchange rate	177 - 179	42
B. Interest	180 - 183	42
C. Claim preparation costs	184	43
V. RECOMMENDATIONS	185	44

List of claimants

Name	Defined
Kuwait National Petroleum Company	KNPC

List of currencies

Name	Defined
Kuwaiti dinar	KWD
United States dollar	USD

List of tables

		Page
1.	Part one of the seventh instalment of “E1” claims	5
2.	Business interruption losses	9
3.	Damage to plant and equipment	10
4.	Tangible property losses	10
5.	Cost overruns	10
6.	Bad debts	11
7.	KNPC’s claim for business interruption losses	12
8.	Damage to plant and equipment of Local Marketing and Head Office	26
9.	KNPC’s claim for equipment, surplus construction materials and inventory	33
10.	KNPC’s claim for loss of goods in transit	34
11.	KNPC’s claim for cost overruns	39
12.	KNPC claims – total recommended compensation	41
13.	Currency exchange rate and interest	43
14.	Panel’s recommended compensation	44

Introduction

1. At its sixteenth and thirty-sixth sessions, the Governing Council of the United Nations Compensation Commission (the "Commission"), pursuant to article 18 of the Provisional Rules for Claims Procedure (the "Rules") (S/AC.26/1992/10), appointed a Panel of Commissioners (the "Panel") composed of Messrs. Allan Philip (chairman), Antoine Antoun and Michael Hwang to review energy sector claims submitted by corporations, other private legal entities and public-sector enterprises ("E1" claims).

2. This report contains the determinations and recommendations of the Panel with respect to part one of the seventh instalment of "E1" claims. Pursuant to Governing Council decision 114 (S/AC.26/Dec. 114 (2000)), a separate report should be prepared for each claim "with a recommended value of USD 1 billion or more".

3. The claim included in part one of the seventh instalment of claims was filed by an energy sector company operating in the State of Kuwait ("Kuwait"), Kuwait National Petroleum Company (K.S.C.) ("KNPC"). The claimant advances claims arising from the disruption to its business and damage to its property allegedly caused directly by Iraq's invasion and occupation of Kuwait.

4. In its original claim filed in July of 1993, Kuwait National Petroleum Company (K.S.C.) ("KNPC") claimed that it suffered total damage in the amount of 678,461,603 Kuwaiti dinars (KWD) (exclusive of interest and the cost of claims preparation) as a direct result of Iraq's invasion and occupation of Kuwait. That original claim was based on KNPC's estimate of the extent of its damage. In response to the Panel's article 34 notification, KNPC subsequently reduced the total amount of its claim to KWD 665,123,939. 1/ It is the latter amount that is discussed in this report.

5. KNPC's revised claim amount, net of any claim for interest or claim preparation costs, is shown in the following table. The issues of interest and claim preparation costs are addressed in paragraph 184 below.

Table 1. Part one of the seventh instalment of "E1" claims

Claimant	Claim number	Original claim amount (KWD)	Revised claim amount (KWD)	Submitting Government
Kuwait National Petroleum Corp.	4003070	678,461,603	665,123,939	Kuwait

I. PROCEDURAL HISTORY OF THE CLAIM

6. The role and functions of panels of Commissioners operating within the framework of the Commission and the nature and purpose of the proceedings conducted by the panels are both discussed by the Panel in the "Report and recommendations made by the Panel of Commissioners concerning the second instalment of 'E1' Claims" (S/AC.26/1999/10) (the "Second 'E1' Report"), paragraphs 3-4.

7. The secretariat of the Commission (the "secretariat") commenced a detailed preliminary assessment of the seventh instalment claims in September 2000. As a result of this review, a number of formal deficiencies in the claim file were identified, as were a number of areas where further documentation or information would be required from the claimant. Accordingly, detailed notifications with respect to these deficiencies were issued to KNPC pursuant to article 34 of the Rules (the "article 34 notifications").

8. Pursuant to article 16 of the Rules, the Executive Secretary reported to the Governing Council the claim information and significant factual and legal issues raised by the seventh instalment in his report dated 6 July 2000. This report was circulated to all Governments that submitted claims and to the Republic of Iraq ("Iraq"). Pursuant to article 16 (3) of the Rules, both Kuwait and Iraq submitted information concerning the KNPC claim to the Commission. This information has been taken into consideration by the Panel during its review of the claim.

9. The Panel issued the first procedural order relating to the KNPC claim on 30 September 2000. In view of the complexity of the issues raised, the volume of the documentation underlying the claim and the amount of compensation sought by KNPC, the Panel classified the claim as "unusually large or complex" within the meaning of article 38 (d) of the Rules.

10. The Panel also instructed the secretariat to transmit to Iraq the statement of claim and the documents filed by KNPC with the claim, and invited Iraq to submit its comments on the claim, together with any documentation on which Iraq might wish to rely in support of its comments. In March 2001, Iraq filed its written comments on the claim.

11. In its review of the claim, the Panel has employed the full range of investigative procedures available to it under the Rules. The Panel has also been assisted by the responses of the claimant to article 34 notifications, the responses to the Panel's further written and verbal requests, and the written comments filed by Iraq.

12. Because of the complexity of the claim, the Panel engaged consultants with expertise in accounting, asset valuation, refining operations, marketing and pricing to assist it in its review and evaluation of those claim elements found to be compensable.

13. After receiving responses to the article 34 notifications, the Panel directed a technical inspection mission to the premises of KNPC to review documents and other evidence and to interview witnesses. During this and other technical inspection missions, the claimant produced numerous witnesses for interview and many thousands of documents for review.

14. The initial work raised specific legal issues and identified areas of the claim for which further factual investigation or evidence was required. To address this need, the Panel prepared questions and formal requests for additional evidence from KNPC. Such questions and requests (collectively referred to as “interrogatories”) typically sought clarification of statements in the claim or additional documentation regarding the claimed losses. KNPC responded to the Panel’s interrogatories with additional information.

15. A procedural order was issued on 11 June 2001 inviting KNPC and Iraq to attend oral proceedings and to present arguments and evidence on certain issues presented in the claim (the “oral proceedings”). The oral proceedings were held on 11 September 2001.

16. Prior to and during the oral proceedings, KNPC and Iraq submitted additional documents, written comments and memoranda. During the oral proceedings, both KNPC and Iraq made substantive oral presentations on the issues raised by the Panel. The specific issues raised by the Panel, as well as the main arguments advanced by KNPC and Iraq at the oral proceedings, are summarized in subsequent sections of the report and are addressed in the Panel’s findings.

17. After reviewing the claim, the evidence submitted with the claim, KNPC’s responses to the article 34 notifications, Iraq’s written comments on the claim, KNPC’s and Iraq’s responses to interrogatories and the documents and arguments presented at the oral proceedings, the Panel made the recommendations contained in this report.

II. LEGAL FRAMEWORK

A. Applicable law and criteria

18. The law to be applied by the Panel is set forth in article 31 of the Rules, which provides as follows:

> "In considering the claims, Commissioners will apply Security Council resolution 687 (1991) and other relevant Security Council resolutions, the criteria established by the Governing Council for particular categories of claims, and any pertinent decisions of the Governing Council. In addition, where necessary, Commissioners shall apply other relevant rules of international law."

B. Liability of Iraq

19. According to paragraph 16 of Security Council resolution 687 (1991):

> "Iraq, without prejudice to the debts and obligations of Iraq arising prior to 2 August 1990, which will be addressed through the normal mechanisms, is liable under international law for any direct loss, damage, ... or injury to foreign Governments, nationals and corporations, as a result of Iraq's invasion and occupation of Kuwait."

20. The Panel notes that the issue of Iraq's liability for losses falling within the Commission's jurisdiction has been resolved by the Security Council and is not subject to review by the Panel. A complete discussion of the liability of Iraq as it relates to the resolution of the claims and the Governing Council's guidance on what constitutes a direct loss may be found in the Second "E1" Report at paragraphs 18-29.

C. Evidentiary requirements

21. Article 35 (1) of the Rules provides general guidance on the submission of evidence by a claimant:

> "Each claimant is responsible for submitting documents and other evidence which demonstrate satisfactorily that a particular claim or group of claims is eligible for compensation pursuant to Security Council resolution 687 (1991)."

22. A complete discussion of the Panel's application of this standard to the evidence submitted with the claims may be found in the Second "E1" Report at paragraphs 30-32.

III. CLAIM OF KUWAIT NATIONAL PETROLEUM COMPANY (K.S.C.)

A. Introduction and preliminary findings

23. KNPC is a corporate entity, the shares of which are wholly owned by Kuwait Petroleum Company ("KPC"). The Government of Kuwait wholly owns KPC's shares.

24. KNPC engages in three categories of business activity in Kuwait: (a) refining crude oil, (b) processing associated gas for the production of liquefied petroleum gas ("LPG"), and (c) distributing and selling refined petroleum products.

25. The primary manufacturing assets that are owned and operated by KNPC in Kuwait are three petroleum refineries, an LPG plant, a bitumen plant, a lube oil blending plant and bulk storage depots. Additionally, KNPC owns retail filling stations, car washes, an office building and a staff recreational facility, and it leases other office and staff facilities.

26. KNPC has been organized into one administrative and four operating units to carry out its business functions. The operating units are the Shuaiba Refinery ("Shuaiba Refinery"), the Mina Abdulla Refinery ("MAB Refinery"), the Mina Al-Ahmadi Refinery ("MAA Refinery"), and local marketing activities ("Local Marketing"). The LPG plant and the bitumen plant are operated by the MAA Refinery, and are assigned to that operating unit. Local Marketing operates the lube oil blending plant, bulk storage depots, retail filling stations and car washes. The office building and the staff recreational facilities are the responsibility of a centralized administrative component (the "Head Office").

27. KNPC utilized, inter alia, the services of two loss adjusting firms to assist it in calculating its damages (collectively, the "adjuster").

28. The claim can be generally divided into five types of damages. Those types are in descending order of magnitude:

(a) Financial losses and loss of profit by the four operating units on manufacturing operations and retail sales (the "business interruption losses"), as shown in table 2:

Table 2. Business interruption losses

Business unit	Revised claim amount (KWD)
Shuaiba Refinery	82,882,756
MAB Refinery	189,403,422
MAA Refinery & LPG plant	168,043,484
Local Marketing	3,572,125
Total	443,901,787

(b) Damage or destruction of fixed manufacturing facilities, retail outlets and buildings ("damage to plant and equipment"), as shown in table 3:

Table 3. Damage to plant and equipment

Business unit	Revised claim amount (KWD)
Shuaiba Refinery	46,830,844
MAB Refinery	56,709,177
MAA Refinery & LPG plant	82,222,978
Local Marketing	9,816,967
Head Office	998,509
Total	196,578,475

(c) Theft, damage or destruction of inventory items (including catalyst and other manufacturing materials, removable equipment, stores of finished product, vehicles, surplus construction materials, furniture and office equipment), goods in transit and cash (collectively the "tangible property losses"), as shown in table 4:

Table 4. Tangible property losses

Business unit	Revised claim amount (KWD)
Shuaiba Refinery	2,750,416
MAB Refinery	8,840,086
MAA Refinery & LPG plant	6,575,248
Local Marketing	4,629,334
Head Office	16,000
Total	22,811,084

(d) The additional cost for completion of certain construction projects which were planned, or under way, at the time of Iraq's invasion and occupation of Kuwait ("cost overruns"), as shown in table 5:

Table 5. Cost overruns

Business unit	Revised claim amount (KWD)
Local Marketing	1,607,593

(e) Uncollected debts on retail sales ("bad debts"), as shown in table 6.

Table 6. Bad debts

Business unit	Revised claim amount (KWD)
Local Marketing	225,000

B. The claim for business interruption losses

29. KNPC claims entitlement to compensation in the amount of KWD 443,901,787 for operating losses and a reduction in the amount of profit 2/ resulting from the interruption in the normal business of its four operating units. KNPC contends that the period of its business interruption commenced on 2 August 1990, which was the date of the invasion and also the date on which KNPC's revenues from refining operations ceased. KNPC concluded that its refineries and Local Marketing's facilities could reasonably have been repaired and returned to normal operations by 30 June 1994, and thus the claim period ends on that date (the "claim period").

30. The business interruption claim is based on KNPC's assessment of what revenues and expenses would have been realized by the four operating units during the claim period but for Iraq's invasion and occupation of Kuwait (the "no-invasion" scenario). 3/ This assessment was based on the historical financial performance of these four units in the prior three-year period. Actual losses that were incurred or profits that were earned during each financial year 4/ of the claim period were then added to, or deducted from, the assumed lost profits in that year to yield the actual amount claimed.

31. As more completely explained in paragraph 40 below, KNPC's three refineries (inclusive of the LPG plant located at the MAA Refinery) operated without profit or loss (a "break-even" basis) during the last three financial years of the claim period. KNPC's business interruption claim therefore includes an operating loss for the three refineries in only the first financial year (1990/91). Similarly, Local Marketing sustained an operating loss in only the first financial year of the claim period. However, unlike the refining business units, Local Marketing operated profitably during the last three financial years of the claim period, albeit the amount of the profits earned in each of these three financial years was, according to KNPC, less than would have been earned had Iraq's invasion and occupation of Kuwait not occurred. Actual profits earned by Local Marketing in the final three years of the claim period were subtracted from estimated no-invasion profits.

32. KNPC's contentions with respect to its business interruption losses, as restated by operating unit and year of loss, are shown in table 7 below.

Table 7. KNPC's claim for business interruption losses

(Kuwaiti dinars)

Operating unit	1990/1991	1991/1992	1992/1993	1993/1994	Total
Shuaiba Refinery					
No-invasion profit	18,025,673	18,101,831	17,965,491	17,965,491	
Actual operating loss	10,824,270	Nil	Nil	Nil	
Subtotal	28,849,943	18,101,831	17,965,491	17,965,491	82,882,756
MAB Refinery					
No-invasion profit	32,735,835	30,860,947	31,469,007	31,469,007	
Actual operating loss	62,868,626	Nil	Nil	Nil	
Subtotal	95,604,461	30,860,947	31,469,007	31,469,007	189,403,422
MAA Refinery					
No-invasion profit	22,556,041	22,410,962	23,934,922	22,800,158	
Actual operating loss	51,039,970	Nil	Nil	Nil	
Subtotal	73,596,011	22,410,962	23,934,922	22,800,158	142,742,053
LPG plant					
No-invasion profit	3,997,918	3,015,327	2,925,394	2,925,394	
Actual operating loss	12,437,398	Nil	Nil	Nil	
Subtotal	16,435,316	3,015,327	2,925,394	2,925,394	25,301,431
Subtotals of refining units	214,485,731	74,389,067	76,294,814	75,160,050	440,329,662
Local Marketing					
No-invasion profit	1,533,329	1,533,329	1,533,329	1,533,329	6,133,316
Actual operating loss/(profit)	488,278	(679,865)(a)	(845,632)(a)	(1,523,972)(a)	(2,561,191)(a)
Subtotal	2,021,607	853,464	687,697	9,357	3,572,125
Totals for all operating units	216,507,338	75,242,531(b)	76,982,511(b)	75,169,407(b)	443,901,787

a/ Indicates an operating profit in these three years by Local Marketing.

b/ The relatively minor differences in the amount of no-invasion profits were caused by variations in expected operating cost from year to year, largely due to variations in annual refinery maintenance expense.

1. Facts and contentions

(a) The refining units and LPG plant losses

33. Virtually the entirety of KNPC's business interruption claim, KWD 440,329,662, relates to a loss of processing fees that KNPC allegedly would have received during the claim period (the "processing fee(s)"). KNPC contends that the processing fees would have been paid to it by KPC in accordance with the terms of a processing agreement between itself and KPC which was in place on the date of the invasion (the "processing agreement").

34. The processing fee was a "cost-plus" payment that KPC made to KNPC in return for KNPC's refining and processing services and the use of KNPC's facilities. Under the processing agreement, KNPC was required to reserve the entire capacity of its three refineries and its LPG plant to refine crude oil and process associated gas belonging to KPC.

35. Although another wholly-owned subsidiary of KPC, Kuwait Oil Company ("KOC"), actually supplied KNPC with all of the crude oil and associated gas feedstocks, KOC did so as an agent for KPC. KOC did not own the crude oil or associated gas that it delivered to KNPC. KPC, as the owner of these feedstocks, retained its ownership interest while the feedstocks were in the custody of KNPC. KPC subsequently took delivery from KNPC of all of the refined petroleum and LPG products that were extracted from the feedstocks during the refining processes.

36. Thus, KNPC can be best described as being merely a processor of hydrocarbons for its parent company, KPC. As explained in the preceding paragraph, KNPC did not take title to the crude oil or associated gas feedstocks that were delivered to it by KOC. It did not receive any revenue from the sale of the refined products and LPG derived from processing those feedstocks. As more completely explained in paragraph 47 below, even though KNPC's Local Marketing unit sold a portion of the refining units' production through its retail service station outlets in Kuwait, it did so as the agent for KPC, as all of the revenues from these sales were returned to KPC.

37. The base component of the processing fee paid by KPC to KNPC was calculated at 110 per cent of the annual budgeted costs of each of the three refineries, including depreciation, operating costs and an allocated portion of KNPC's Head Office costs (the "base fee"). If, in a given year, the actual costs incurred by a refining unit (including the LPG plant at the MAA Refinery) proved to be less than the budgeted costs for that year, then the processing agreement provided that the refining unit was allowed to retain the saving and thereby increase its profits, due to the fact that the 10 per cent margin was applied to budgeted rather than actual costs. Thus, from an accounting standpoint, overstated budgets worked to the financial advantage of KNPC and, conversely, understated budgets worked to its disadvantage. KNPC contends that the base fee was designed to provide an economic incentive for reducing the refineries' operating costs. The processing agreement provided that KPC and KNPC would agree each year on KNPC's annual budget for the following year.

38. The base fee was subject to adjustment by reference to various performance-related criteria, including increased volume of throughput, reduced consumption of lean gas, and improved product

quality (the "adjustment"). 5/ Again, KNPC contends that the adjustment served as an incentive for improving operating efficiencies.

39. KPC was the sole refining customer of KNPC. Any processing fee revenue that was received by KNPC was an expense to KPC of identical amount. Thus, KNPC's claim for business interruption loss can be categorized as being a claim for the loss of a fee, which the parent company (KPC) determined that it would not continue to pay to its subsidiary (KNPC) following Iraq's invasion and occupation of Kuwait. That determination was formally made when KPC suspended payments to KNPC under the processing agreement, effective as of 2 August 1990. 6/

40. KPC made no processing fee payments to KNPC from 2 August 1990 until the conclusion of KNPC's financial year on 30 June 1991. As a result of the total discontinuance of processing fee payments for these first eleven months of the claim period, KNPC contends that it incurred an operating loss in its financial year 1990/91. From 1 July 1991 to 30 June 1994, KPC reimbursed KNPC for its actual operating costs. KNPC's three refineries operated on a break-even basis for these final three financial years of the claim period, as KPC reimbursed KNPC for 100 per cent of the costs that the refineries incurred. Thus, the business interruption portion of the claim includes the operating loss that KNPC's refineries sustained in financial year 1990/91. The business interruption portion of the claim also includes a component for profits that would have been earned by KNPC in a no-invasion scenario for all four financial years contained in the claim period.

41. All three refining units (including the LPG plant) were operating at their maximum capacity on 2 August 1990. Iraqi troops arrived at the gates of the MAA Refinery and the MAB Refinery on that date, and arrived at the Shuaiba Refinery on 3 August 1990.

42. On those same days, acting under orders from the commanders of the Iraqi army units, the refinery managers (or acting managers) initiated a complete shutdown of the plants. KNPC claims that a complete shutdown should be conducted in a progressive fashion over a period of approximately five days. KNPC alleges that it was forced by the Iraqis to complete the shutdown of two of the refineries in a much shorter time period. Due to the emergency nature by which the refineries were shut down, KNPC was unable to clear all fluids from the processing units and, due to a shortage of nitrogen, it was unable to completely fill the units with inert gases once shut down. KNPC contends that these factors contributed to excessive corrosion of all of the processing units, which occurred over the prolonged period of disuse of the refineries, both during the time of Iraq's invasion and occupation of Kuwait and during the period of its physical restoration of the refineries through repair or replacement of damaged/destroyed processing units and other facilities (the "refinery restoration project").

43. Following the forced shutdowns, the refineries remained effectively idle for the duration of the occupation. Iraqi officials did, however, operate a limited number of the processing units during this period. KNPC claims that Iraq's inappropriate and negligent operation of some of the processing units resulted in further damage to those units. Neither KPC nor KNPC derived any revenue from the products that were produced by the Iraqis during their limited operation of the refineries, and KNPC received no processing fees from KPC as a result of the partial operation of the refineries by the Iraqis.

44. As more extensively discussed in the property damage portion of this claim, section C below, KNPC claims that the three refineries suffered extensive property damage due to Iraq's invasion and occupation of Kuwait.

(b) Local Marketing losses

45. The remaining portion of KNPC's claim for business interruption losses, KWD 3,572,125, represents the operating losses incurred by Local Marketing in financial year 1990/91, plus the reduction in the profits that would have been earned by Local Marketing but for Iraq's invasion and occupation of Kuwait over all four years of the claim period.

46. On 2 August 1990, the principal business of Local Marketing consisted of the distribution and sale of refined petroleum products in the Kuwaiti domestic market. Local Marketing also supplied the fuel needs of the Ministry of Electricity and Water and sold bunker oils for local watercraft and ocean-going vessels calling at the port of Shuwaikh.

47. All sales of petroleum products were made for the account of the parent company, KPC, and KNPC derived no profits from the marketing activities of Local Marketing. All revenue from retail marketing operations was transferred to KPC. KPC, in turn, reimbursed KNPC for its operating costs, but did not pay any percentage uplift on its marketing costs as it did for KNPC's refining operations. Thus, Local Marketing makes no claim for operating losses or loss of profits pertaining to retail sales of refined products in Kuwait.

48. Local Marketing imported, for its own account, lube oil blending stocks that were processed at its lube oil blending plant located adjacent to the Shuaiba Refinery. It marketed the finished lube oil products produced at this plant, both through its retail service stations and in bulk. Local Marketing also marketed car accessories, such as batteries and windshield wipers, through its retail service stations. Finally, Local Marketing owned and operated a number of car washes in Kuwait, which were located adjacent to some of its service stations. Local Marketing retained all profits derived from these three business lines, which represented the only sources of profit for Local Marketing and the only source of external profit for KNPC. Local Marketing kept separate accounts for the expenses incurred in its operation of these three business lines, and KPC did not reimburse KNPC for these expenses.

49. Most of Local Marketing's retail service stations were closed on 2 August 1990, as station attendants returned to their homes or fled. Local Marketing reopened a limited number of stations in the following days, and it operated these stations for the needs of the local market until petroleum stocks at such stations were depleted. 7 / Local Marketing states that it did not make any cash collections from its service stations during Iraq's invasion and occupation of Kuwait, and thus it derived no benefit from the limited retail sales that were made during this period. KNPC admits that it cannot make an accurate account of the sales revenue that was generated by Local Marketing during Iraq's invasion and occupation of Kuwait, but it contends that at least a part of these funds (and perhaps the largest share) was divided amongst KNPC employees, who were not being paid by their employer during this period.

50. As further discussed in the property damage portion of this claim, found in section C below, most of Local Marketing's facilities were damaged to some degree as a result of Iraq's invasion and occupation of Kuwait.

2. Evidence presented in support of the claim for business interruption losses

51. The following is a partial listing of the numerous documents and other forms of evidence submitted by KNPC in support of its claim for business interruption losses:

(a) A five-volume report prepared by the adjuster, detailing the methodology used in calculating the amount of the business interruption losses (and also covering the other aspects of the KNPC's claim, which are addressed in sections C, D, E, and F below);

(b) Fifteen written statements of witnesses, all of whom were serving as senior executives of KNPC or in other management capacities during the claim period;

(c) KNPC's written responses to the Panel's article 34 notifications and subsequent interrogatories;

(d) Audited financial statements for KNPC;

(e) A copy of the processing agreement between KPC and KNPC dated 10 January 1982;

(f) Debit notes with respect to charges paid by KOC to its external project manager for the Al Awda and Al Tameer projects (which were largely focused on repair and restoration of KPC's "upstream" oil and gas production operations); 8/

(g) The "Damage Assessment Report" prepared by an engineering committee comprised of KNPC employees dated January 1992; and

(h) Voluminous financial records, reports, contracts and other documents relating to specific aspects of the claim, which were gathered in a data centre established by KNPC in Kuwait City, indexed and made available for inspection.

52. Following the examination of the materials in the data centre, the Panel issued several interrogatories to KNPC, including a supplemental request for the production of additional documents. KNPC replied to these questions and provided copies of most of the documents requested. At the further request of the Panel, KNPC made available 14 of its current and former employees for interviews. KNPC also gathered documents relevant to its claim that were in the possession of both its adjuster and the company that was retained by KNPC as its project management consultant for the refinery restoration project. KNPC indexed the documents received from those two sources and made them available for inspection.

3. Iraq's response and oral proceedings

53. In its March 2001 comments, Iraq presented arguments as to why the claim should not be compensable. On 11 September 2001, the Panel conducted the oral proceedings on the claim. In issuing its notice of the oral proceedings, the Panel asked the participants to remark on the following issue:

> "Whether in considering the business interruption losses alleged by KNPC, the Panel should rely on the terms of the Processing Agreement between KNPC and KPC for the purpose of determining the amount of profits KNPC would have earned in a "no-invasion" scenario; or, alternatively, whether KNPC's lost profit, if any, should be determined by comparison to the business performance of other refiners."

54. Iraq participated in the oral proceedings and argued that KNPC's refinery losses, if any, during the claim period, should be measured by comparison to the financial results of the open-market refining industry. Iraq also repeated several other comments made in its written response to KNPC's statement of claim. 9/

55. The following is a summary of Iraq's arguments against an award of compensation for the business interruption portion of KNPC's claim.

(a) Business interruption losses of the sort claimed by KNPC were unforeseeable and indirect.

(b) The methodology used by KNPC to calculate its business interruption losses is invalid because it bears no relationship to open-market conditions. The amount claimed by KNPC for business interruption is inconsistent with the overall profitability of the refining industry during the claim period. KNPC's profits were, in the main, a product of the size of KNPC's annual budget. The amount of KNPC's profits bore no relationship to the efficiency of its manufacturing operations. The processing fee formula offered KNPC's refining units an incentive to inflate the amount of their annual budgets, as larger budgets led to larger profits.

(c) Certain of the data used to make adjustments to the theoretical processing fees were unreliable.

(d) KNPC took an unreasonable period of time to repair the damage to its plant and equipment and, in the case of the three refineries, these facilities should have been restored no later than the end of 1992. Because the refinery restoration project was not carried out in an expeditious manner, the claim period was longer than was reasonable, and thus the amount of the business interruption claimed was excessive and, to a degree, avoidable. The tendency of the project management consultant to recommend the replacement of damaged units (instead of repairing them) further delayed the completion of the refinery restoration project.

(e) Open-market economic conditions in the refining industry were poor during the claim period. Because of weak demand, most refineries in the open-market operated at less than full capacity during this time. Therefore, KNPC had a disincentive to hasten the return of its refining units to full operating capacity.

(f) Finally, KNPC's refining units should have been able to earn limited profits during the claim period, while the refinery restoration project was ongoing, even though full refining capacity had not been restored.

4. Methodology for computing refinery losses

56. KNPC relied on the same methodology to calculate the business interruption losses of its refining units as was used by KPC in its business interruption claim to calculate its reduction in the amount of processing fees paid to KNPC (or KPC's cost savings). KNPC first estimated those processing fees that it would have earned in a no-invasion scenario. In order to calculate these fees, KNPC relied on historical data over the three financial years prior to the invasion. The historical data accumulated with respect to those three years included each refinery's operating budgets, actual fixed and variable costs, and processing throughput (or capacity utilization).

57. Taking into consideration the figures included in the prior-year data, KNPC projected what annual budgets would have been adopted and what expenses would have been incurred by each of the three refining units during the claim period in a no-invasion scenario. KNPC also estimated the other variables taken into account in the processing fee formula, including processing fee adjustments for reductions in gas use, variations in crude oil throughput and changes in refined product mix.

58. Having estimated what each refinery's budgets and operating levels would have been during the claim period, KNPC then calculated the likely gross amount of processing fees that KPC would have paid to KNPC during the claim period. From that figure, KNPC deducted its estimate of the expenses that it would have likely incurred during the claim period. The remainder represents the KNPC's estimate of the level of profits that each refining unit would have earned.

59. This estimate of lost profits was adjusted by the actual results of the three refining units during the claim period (by deductions for actual profits and additions for actual losses) to derive the estimate of the level of profits that KNPC failed to realize. As previously stated in paragraph 40 above, KNPC's annual financial reports show that the three refining units each incurred an operating loss during the first year of the claim period, but broke even in the final three years of the claim period.

5. Methodology for computing Local Marketing losses

60. Unlike the domestic sale of petroleum products (for which KNPC enjoyed an absolute monopoly), business entities other than KNPC were allowed to market lube oils and auto accessories in Kuwait, in competition with KNPC. As reported in paragraph 48 above, KNPC only claims a reduction in the level of profits that it would have earned on the sale of lube oils, auto accessories and car washes.

61. The methodology used by KNPC to calculate the reduction in profits suffered by Local Marketing is based on estimated sales in a no-invasion scenario, with reference to average sales in the three years

preceding Iraq's invasion and occupation of Kuwait. Only sales results relating to that limited portion of Local Marketing's business operations on which it was allowed to make a profit were used in this calculation. From predicted sales revenue, KNPC then deducted its estimate of the segregated operating expenses that Local Marketing would have incurred during the claim period in the pursuit of its limited profit-making endeavours, again based on averages of its costs over the three-year period prior to the invasion. KNPC then deducted the actual financial results of Local Marketing during the claim period. As shown in table 7 above, Local Marketing experienced an actual loss in financial year 1990/91 but was able to return to profitability in the final three years of the claim period.

6. Panel findings

62. KOC restored its crude production field operations prior to KNPC's completion of the refinery restoration project. Normally, KPC utilized the full extent of KNPC's refining capacity to process some portion of KOC's total crude production. During the period between KOC's restoration of full field production and KNPC's completion of the refinery restoration project, KPC was limited in the quantity of crude oil that it could have processed in KNPC's three refineries. For each barrel of KNPC's reduction in refining capacity, KPC was forced to sell a barrel as crude oil, rather than as the various refined products that the barrel would have yielded had it been processed by KNPC. The refined products extracted from a barrel of crude oil sell at a premium compared to the sale of a barrel of crude oil itself. During the period of the refinery restoration project, KNPC did not receive the normal level of its processing fees, and the total revenue received for the sale of KPC's crude and refined products decreased. Thus, contrary to Iraq's assertion, the Panel finds that both KNPC and KPC had a substantial economic incentive to restore the three KNPC refineries to their full processing capacities as soon as possible.

63. It is correct, as Iraq contends, that refining operations were restored by KNPC over the duration of the claim period, and that refining capacity steadily increased during these four years. However, the partial restoration of the refining capacity did not place KNPC in an economic position whereby it could achieve profits from those operations. Refining profits were a function of the amount of processing fees paid by KPC to KNPC and, as stated in paragraph 40 above, the processing agreement between the two was suspended for the whole of the claim period.

64. The Panel finds that the extended period of the refinery restoration project was largely the result of external forces beyond the control of KNPC. Work on the restoration of the refineries began shortly after 2 March 1991 when an in-house damage assessment team was organized. Progress in restoration was hampered by the need to clear unexploded ordnance, by shortages of manpower and materials, and by war damage to Kuwait's civil works infrastructure, such as roads, bridges, port facilities, water distribution and the electricity grid. Actual repairs were further delayed by the time spent in preparing bid packages and soliciting bids, in compliance with KNPC's competitive bid procedures. A contract was executed in early 1992, following a competitive tender, for the post of project management consultant, and that company assumed the primary advisory role to KNPC on the refinery restoration project. Separate engineering, procurement, and construction contracts were executed for each of the refineries in the final quarter of that year, again after competitive bidding. KNPC's operations were

restored in stages, as individual manufacturing units and components were returned to operation following repair or replacement. The refinery restoration project was largely completed before the end of 1994, but the repairs were not completely effected until 1997. The Panel therefore finds that the refinery restoration project was not deliberately delayed by KNPC and that it was accomplished within a reasonable time period.

65. The formula used for calculating the processing fee, as described in paragraphs 37 and 38 above, enabled KNPC to realize an annual profit on its refining operations, so long as its total, end-of-year operating costs were less than the authorized level of spending set in its beginning-of-year budget, plus 10 per cent.

66. KNPC and KPC were free to agree on a processing fee of whatever size they chose without risk of consequence to their combined financial performance. A processing fee that is booked as an expense by a paying affiliate will be recorded as income of an equal amount to a receiving affiliate. From an accounting standpoint, because the one cancels the other, the absolute amount of the processing fee is inconsequential to the profitability of the integrated companies when viewed as a whole.

67. The processing fee was designed to advance the unique objectives that were inherent in the business relationship between KPC and KNPC. It was an agreed method by which a parent company, KPC, paid a portion of its annual revenues for services rendered by its subsidiary, KNPC. The critical point in that arrangement was that, when determining its own profitability, KPC each year took a charge against its product sales revenue for the portion of the revenue that it paid to KNPC in the form of processing fee payments. Thus KPC reduced its own annual profits by the amount of revenue that it paid to KNPC through the payment of processing fees.

68. The amount of processing fee paid by KPC to KNPC, as measured on a per barrel basis, was less than the amount of value added to each barrel by that processing (in terms of higher petroleum product prices). The Panel therefore concludes that KPC would have continued to use KNPC's services during the whole of the claim period so that it could, to the maximum extent possible, replace its crude oil sales with the sale of petroleum products.

69. The domestic petroleum industry was, at the time of Iraq's invasion and occupation of Kuwait, an integrated industry. KPC, as the owner of KNPC, had made a substantial capital investment in the refining component of that industry. Given the size of its investment, the Panel believes it reasonable to conclude that KPC would have continued to utilize the maximum capacities of KNPC's three refineries to process its crude oil and associated gas for the duration of the claim period, whatever the size of the processing fee on which the two companies agreed. The only logical reason why KPC might have decided to use a non-affiliated company to process its crude oil instead of KNPC would have been under circumstances where the per barrel processing fee offered by the non-affiliated company proved to be less than the per barrel variable costs being incurred by KNPC in the operation of its refineries. There is no evidence to suggest that there was another crude refiner in the Persian Gulf that would have been willing to process KPC's crude at such a price. Consequently, given the huge capital investment involved in the petroleum refining industry, the Panel believes it doubtful that

an alternative processor could have offered to work for KPC in return for a processing fee that would have been lower than KNPC's variable costs.

70. KNPC did not provide petroleum-refining services to any customer other than KPC. KNPC owned neither the feedstocks that were processed in its three refineries, nor the refined products that were produced by them. KNPC took neither raw material nor product price risks. Because KNPC operated in a closed market, the Panel finds that the comparative refining rates of other refiners and the profitability of the refining industry as a whole are not relevant to the claim.

71. There is an interrelationship between the Panel's earlier findings on the amount of business interruption damage sustained by KPC as a result of Iraq's invasion and occupation of Kuwait and the amount of business interruption damage now claimed by KNPC. In the Fourth "E1" Report, the Panel found that KPC would have paid KNPC an additional USD 2,022,000,000 in processing fees in a no-invasion scenario. 10/ This amount was a cost saving to KPC, and therefore was deducted from KPC's award for lost profits on production and refining sales. KNPC's claim for business interruption damage is derived from the same components as were used by KPC to calculate its cost savings on KNPC processing fees. 11/

72. KPC's estimate of cost savings on processing fees was based on the recommendation made by the adjuster in its report to KNPC. In the Fourth "E1" Report, the Panel accepted KPC's estimate of this cost savings, noting that the estimate appeared to be reasonable, and further noting that the calculation of lost revenues on processing fees would be subjected to later verification by the Panel during its consideration of KNPC's claim for business interruption loss. 12/ By accepting KPC's estimate on cost savings on processing fees, the Panel set an upper limit on the amount of processing fees that KNPC might include in its separate claim for business interruption losses. As noted in the preceding paragraph, KNPC claims that the processing fee revenue, from which it would have derived its profits during the claim period, should be calculated in a manner that is consistent with the methodology used by KPC to determine its cost savings on those same processing fees. Thus, the Panel finds that KNPC's claim for lost processing fee revenue and KPC's past deduction for cost savings on processing fees are internally consistent.

73. KPC and KNPC made complementary adjustments to their business interruption claims to reflect the disruption in payment of normal processing fees from one to the other. KPC deducted USD 2,022,000,000 from its production and sales loss claim to reflect the amount of its cost savings on the additional processing fees that it would have paid to KNPC in a no-invasion scenario. KNPC now claims, as the Panel considers appropriate, that it would have received this same amount of additional processing fees in a no-invasion scenario. KNPC has used this gross figure as the basis for calculating its claim for business interruption losses.

74. The Panel has verified the methodology used by both KPC and KNPC to estimate the amount of additional processing fees that would have been paid by KPC to KNPC during the claim period but for Iraq's invasion and occupation of Kuwait. The Panel reaffirms the finding made in the Fourth "E1" Report that KPC made a reasonable estimate of the amount of those fees, as discussed in paragraph 72 above.

75. Having taken all of the above into consideration, the Panel finds that the following incidents were direct results of Iraq's invasion and occupation of Kuwait:

(a) The initial shutdown of KNPC's three refining units in August 1990;

(b) The cancellation of the processing agreement by KPC, effective on 2 August 1990, and KNPC's consequential loss of processing fee revenue over the claim period;

(c) The prolonged non-use, or limited use, of the refineries both during the occupation and during the subsequent period of the refinery restoration project; and

(d) The prolonged non-use, or limited use, of Local Marketing's facilities, both during the occupation and during the subsequent period of the repair and restoration of those facilities.

76. The Panel finds that, due to the suspension of the processing agreement, KNPC was unable to earn any profit on its refining operations during the claim period, even as those operations were being gradually restored as work on the refinery restoration project progressed.

77. The Panel finds it appropriate to use the processing fee formula described in paragraphs 37 and 38 above to calculate the business interruption losses of KNPC's three refineries during the claim period.

78. The Panel finds the methodology used by KNPC to estimate the business interruption losses of Local Marketing to be appropriate.

79. The historical financial information used in the calculation of KNPC's business interruption losses was taken from the financial records of each of the four operating units, and the Panel confirmed the accuracy of this data by independent examination. Specifically, upon examination of the financial records of KNPC, the Panel concludes as follows.

(a) KNPC's estimate of the beginning-of-year budgets on which it would likely have agreed with KPC for the final three years of the claim period was a reasonable approximation of its no-invasion budgets, based upon the size of prior-year budgets.

(b) KNPC's estimate of the throughput levels/capacity utilization of the three refineries, as applied to the processing fee formula during the claim period, was a reasonable approximation of what those levels or volumes would have been in a no-invasion scenario.

(c) Subject to the adjustment recommended in paragraph 80 below, KNPC's estimate of the anticipated costs that its three refineries would have incurred during the claim period, while operating at these levels, was a reasonable approximation of what its operating costs would have been in a no-invasion scenario.

(d) KNPC's estimate of the level of annual adjustments for operating efficiencies that would have been made to the base fee during the claim period was a reasonable approximation of its no-invasion adjustments, based upon the historical level of those adjustments.

(e) KNPC’s estimate of the sales that Local Marketing would have made and the expenses that it would have incurred during the claim period was a reasonable approximation of the no-invasion profits of Local Marketing, based on the historical performance of the unit.

7. Adjustments of estimated and actual expenses

80. The Panel finds that the MAB Refinery would have incurred KWD 29,484,000 more in operating expenses during the claim period than reflected in the claimant’s calculation of its business interruption losses. The additional expenses comprise KWD 18,872,000 in additional depreciation expenses and KWD 10,612,000 in additional manpower costs. These increases in expected expenses relate to an expansion of the MAB Refinery that was completed in the year prior to the invasion. The Panel concludes that, based on later years’ averages, the expenses of operating the expanded plant during the claim period would have been higher than KNPC stated in its computation of lost profits. Had the higher expenses been used in the calculation, KNPC’s business interruption claim would have been reduced by a corresponding amount. Accordingly, the Panel finds that KNPC’s business interruption claim must be reduced by KWD 29,484,000.

81. The Panel finds that, during the claim period, the refining units recorded as an operating expense KWD 55,784,911 in maintenance costs for which it also seeks recovery under the property damage portion of this claim. Most of these charges were recorded as expenses of the refineries’ maintenance departments involved in unit overhauls. The Panel believes that award of this expense would result in a double recovery. It therefore finds that this amount must be deducted from the business interruption portion of the claim.

82. The Panel has identified an increase over prior years of KWD 7,302,000 in KNPC’s accrued expenses during the claim period. No evidence has been presented by KNPC to support this increase in accruals, and therefore the Panel finds that they must be disallowed.

83. The Panel finds that an adjustment in the amount of KWD 791,000 must be made to correct an overstatement of expenses in financial year 1993, and an understatement of expenses in financial year 1994. This is necessary because KNPC filed its claim in 1992, at which time it only estimated the amount of expenses that it would incur (and thus the amount of reimbursement it would receive from KPC) during the final two years of the claim period.

84. Finally, there is the issue of the amount of depreciation expense that KNPC has included in its business interruption claim. KNPC’s three refineries were shut down for a significant portion of the claim period. Nevertheless, KNPC continued during that time to record depreciation on its refining assets (except for those assets that were destroyed) at the same rate that it used in the years prior to 2 August 1990. The total depreciation expense that KNPC’s three refineries recorded during the claim period was KWD 333,879,000.

85. The Panel finds that the amount of depreciation taken by KNPC during the claim period caused an artificial increase in its claim for business interruption losses. More specifically, the Panel believes that this level of depreciation expense resulted in an overstatement of KNPC’s operating loss in the

first year of the claim period. Similarly, the level of depreciation expense recorded by KNPC in the last three years of the claim period caused KPC to pay KNPC a reimbursement amount under the interim processing agreement that exceeded the true level of KNPC's expense. The Panel is not persuaded that the amount of depreciation entered on KNPC's books during the claim period is truly reflective of the reduction in the value of the assets that were being depreciated. 13/

86. The Panel has taken into consideration the actual level of operation of the three refineries during the claim period. It has likewise considered the probability that the repair of the refineries largely restored the remaining useful lives of these plants. Finally, the Panel has considered the possibility that KNPC's refining assets may have suffered some reduction in value due to the effects of technical obsolescence during the period of their non-use. Based on these considerations, the Panel finds that the amount of depreciation taken by KNPC on its three refineries during the claim period exceeded the actual reduction in the value of its refining assets by KWD 54,775,000. Thus, the Panel finds that KNPC's claim for business interruption losses must be decreased by this amount.

8. Conclusions and recommendations

87. The Panel finds that KNPC's business interruption claim for KWD 443,901,787 must be reduced by a total of KWD 148,136,911 for the adjustments described in paragraphs 80 through 86 above, and that KNPC should be awarded a total of KWD 295,764,876 for its business interruption losses.

C. The claim for damage to plant and equipment

1. Facts and contentions

88. KNPC originally claimed for damage to plant and equipment in the amount of KWD 208,451,943. The original claim was for the estimated cost of repair, replacement and overhaul of KNPC's manufacturing facilities and buildings to return them to their pre-invasion condition. An estimate was necessary, as restoration work had been commenced but not completed at the time KNPC filed its claim.

89. In response to the Panel's interrogatories, KNPC reduced its claim for damage to plant and equipment to KWD 196,578,475. The lower amount purportedly reflects the actual cost of repair or replacement of damaged or destroyed property and overhaul of equipment.

90. KNPC alleges that the damage to plant and equipment was due to six causes:

(a) Intentional damage by Iraqi forces (primarily theft of component parts, vandalism and detonation of explosives);

(b) Air bombardment by Allied Coalition Forces;

(c) "Hits" by bullets and other ordnance;

(d) Improper operation of refining units by Iraqi personnel;

(e) Internal corrosion in processing units and other equipment as a result of inadequate emergency shutdown procedures employed by refinery personnel, in response to Iraqi military demands for a quick cessation of refining operations; and

(f) Internal corrosion to pipes and pressure vessels and the seizure of moving parts, all due to prolonged lack of use of the refineries from the time of their shutdown until refinery operations were restored.

(a) The refining units' losses

91. As with its claim for business interruption, the great majority (some 95 per cent) of KNPC's claim for damage to plant and equipment involves damage allegedly sustained by the three refineries (including the LPG plant).

92. The costs incurred by KNPC for the restoration and rehabilitation of the three refineries were principally of three types. The largest portion of the costs was for the physical repair or replacement of processing units or related facilities. Most of these costs were paid to external contractors and vendors. The bulk of the costs incurred by the three refining units during the refinery restoration project was spent on goods and services provided by external contractors and suppliers.

93. The second largest portion of the costs was for overhauls of the processing units, maintenance procedures that typically are performed on a processing unit once every three to five years during a routine maintenance exercise known in the refining industry as a "turnaround".

94. KNPC alleges that it was forced to accelerate the timing of its turnaround maintenance due to increased metal corrosion in the inner workings of the processing units. The corrosion allegedly resulted from the prolonged shutdown of the refineries and from the inadequate shutdown procedures that the refinery staff were forced to perform upon the orders of Iraqi military personnel. KNPC also alleges that the costs of this extraordinary maintenance, following Iraq's invasion and occupation of Kuwait, far exceeded the amount that it would have incurred in the course of normal maintenance. Again, it says that the increased overhaul work and the resultant increased cost (as compared to normal maintenance expenditures) were due to the extent of the internal damage caused by the combined forces of improper shutdowns and extended non-use. KNPC states that the extent of the inner corrosion of its refining units was not apparent during initial visual inspections. Rather, only when the units were opened, after the initiation of actual repairs by the project management consultant and the construction contractors, did the magnitude of the corrosion damage become known.

95. However, the claim includes KWD 55,784,911 in internal costs relating to work performed under KNPC's normal maintenance programme.

96. The third type of refinery rehabilitation cost incurred by KNPC comprised the fees charged by its overseeing engineering consultants. Those fees included direct charges by the project management consultant for its advisory work with respect to the refinery restoration project. They also included a small portion of the total charges incurred by KOC for payments to its separate external project

manager on the upstream Al Awda and Al Tameer projects. These charges were transferred from KPC to KNPC by a debit note which covered that part of the work done during the Al Awda and Al Tameer projects that provided benefit to the downstream business. 14/

(b) Local Marketing and Head Office losses

97. The balance of the amount claimed for damage to plant and equipment relates to Local Marketing and KNPC's Head Office facilities. This includes the lube oil blending plant, the storage depots and the filling stations (some 83 in total, plus 10 under construction) which were operated by Local Marketing. It also includes offices, housing, and recreational facilities administered by the Head Office.

98. In tabular form, these two units' claims for damage to plant and equipment can be summarized as set out below:

Table 8. Damage to plant and equipment of Local Marketing and Head Office

Business unit	Revised claim amount (Kuwaiti dinars)
Local Marketing	9,816,967
Head Office	998,509
Total	10,815,476

99. The largest component of the claim for damage to Local Marketing's plant and equipment is the cost of repairing damage to the MAA refined product depot. That facility was under construction, and was 63 per cent complete, on the date of the invasion. Significant portions of the partially-completed work were damaged and had to be repaired. To segregate the cost of damage to the partially-completed project from the final cost of the uncompleted work, KNPC deducted the estimated no-invasion cost of completion of the project from the actual cost of completion.

100. The second largest component of the claim for damage to Local Marketing's plant and equipment is the cost of repairing damage to KNPC's service stations in Kuwait. While KNPC originally stated that virtually all of its retail facilities were damaged during the occupation, it later limited its claim to the damage sustained by only 20 of its retail outlets. As with the case of overhaul work in the refineries, Local Marketing performed a large portion of these repairs in-house through its own engineering and construction section. KNPC has included those internal costs in this portion of the claim.

101. KNPC also claims the cost of repairing damage to buildings that were used by its Head Office unit. Those Head Office facilities include an office building in Kuwait City, a staff recreational facility known as the "Al-Wataniyah Club," a leased building known as the "Chamber of Commerce Building", two leased floors in an office building in Kuwait City, and some 600 residential apartments that were provided to KNPC staff.

2. Evidence presented in support of the claim for damage to plant and equipment

102. The evidence presented in support of this claim element is the same as that listed in paragraphs 51 and 52 above. Most important to this portion of the claim were KNPC's two damage assessment reports, the first having been prepared internally by KNPC's in-house staff shortly after 2 March 1991 and the second prepared later for KNPC by the adjuster.

3. Iraq's response

103. Iraq makes the following arguments with respect to KNPC's claim for damage to plant and equipment.

(a) There is "no conclusive evidence that Iraq caused the alleged damage [and] Iraq left [the refineries and Local Marketing facilities] safe and sound on the way out".

(b) The bombing done by the Allied Coalition Forces caused most of the damage to plant and equipment. Iraq denies the allegations that it detonated explosives in the refineries or that it otherwise intentionally damaged those facilities.

(c) Iraq's military forces allowed KNPC personnel an adequate amount of time within which to shut down the refineries during the occupation. If the processing units suffered any internal corrosion, it was not due to the nature of the shutdown. Alternatively, if internal damage were caused to the processing units by the emergency nature of the shutdowns, this was due to the ineffective or improper manner in which KNPC personnel conducted these shutdowns, as Iraq provided the refinery personnel with an adequate amount of time within which to carry out this task.

(d) The amount claimed for the cost of overhaul of the processing units in the refineries is excessive. The scale of the overhaul should not have greatly exceeded that of a normal turnaround. It was not necessary for KNPC to overhaul all of its refinery processing units.

(e) The cost of normal maintenance has been included as an expense in KNPC's calculation of its claim for business interruption. Thus the total of these normal maintenance expenses for the claim period should be deducted from the amounts claimed for damage to plant and equipment.

(f) Those internal costs of the KNPC personnel who were engaged in the overhaul of units should not be reimbursed as costs of repair to plant and equipment.

(g) Where processing units (or components of units) were replaced with new equipment, this constituted an improvement to the refinery due to the extension of the useful life of the processing units. For this reason, any compensation should be based on the depreciated or book value of the unit that was replaced and not the actual cost of the new equipment. This is particularly relevant to replacement costs spent for restoration of destroyed processing units in the Shuaiba Refinery, as that refinery had not been modernized since 1979.

(h) Similarly, the repair of processing units constituted a refinery improvement, because these repairs extended the useful lives of discrete portions of the refineries. Therefore, deductions should be made for the value of these improvements.

(i) The estimated cost of repair of some units exceeded the replacement cost of those units.

(j) The amount charged by KNPC's project management consultant was excessive and therefore should not be awarded. Specifically, the project management consultant ordered the higher-cost replacement of some damaged units (and components of units), rather than lower-cost repairs, its motivation for doing so being that higher costs to KNPC yielded higher profits for it under its cost-plus contract with KNPC.

(k) KNPC used the refinery restoration project, and the front-end design work that was a part of that project, to plan for and install certain de-bottlenecking features and other improvements to its refineries. Thus, the value of these improvements should be deducted from the damage to plant and equipment.

(l) It is questionable whether KNPC actually installed new equipment in some of the processing units for which it has claimed replacement costs.

4. Panel findings

104. The physical damage to KNPC's plant and equipment occurred during the period of Iraq's invasion and occupation of Kuwait. KNPC's statement of claim included two damage assessment reports. The first was done shortly after the liberation of Kuwait and was prepared by a team comprised of KNPC employees representing different technical, financial and accounting disciplines. KNPC's adjuster prepared the second report. The Panel finds that this evidence establishes that the damage to plant and equipment was directly caused by Iraq's invasion and occupation of Kuwait.

105. Physical damage caused by military activities during Iraq's invasion and occupation of Kuwait is compensable whether caused by Iraq or the Allied Coalition Forces. 15/ The Panel finds that the damage to the plant and equipment of KNPC's four operating units and to the real property facilities of its Head Office was a direct result of Iraq's invasion and occupation of Kuwait.

106. The Panel accepts KNPC's description of the manner and circumstances under which its refineries were shut down following Iraq's invasion of Kuwait, as earlier described in paragraphs 42 and 43. Though Iraq argued to the contrary, it offered no evidence to support a contrary conclusion.

107. The Panel has determined that the scale of the overhaul work undertaken by KNPC following the liberation of Kuwait was necessary to restore the processing units to their pre-invasion operating

condition. The Panel agrees, as Iraq has argued, that KNPC would have incurred normal refinery maintenance expense and that it would be inappropriate for the Panel to compensate KNPC for these normal expenses. KNPC made allowance for its internal costs of normal maintenance by including these costs in its calculation of expected annual operating expenses. However, KNPC recorded a portion of these actual maintenance expenses as property damage repair costs, and thus, in effect, claimed for these same expenses twice. The Panel has recommended a corresponding adjustment to the business interruption portion of the claim in paragraph 81 of this report.

108. There are several methods by which the value of a destroyed asset can be determined. Iraq argues that the value of a destroyed asset as shown on the claimant's accounting records (the "book value") is the best measure of worth. However, the Panel is not persuaded by Iraq's argument, for the reason that the book value of older manufacturing plants is often not reflective of the plants' intrinsic worth. This is particularly true in situations where the period of future operation of a plant as of the date of loss would likely have exceeded the remaining useful life of the plant as shown on the plant owner's depreciation records. Another method of valuation is to attempt to determine the price that a willing buyer would have paid for the asset before its destruction (the "fair market value"). However, the Panel considers that the fair market value method is problematic when, as is the case with the processing units in KNPC's refineries, a destroyed asset is a component of a larger manufacturing plant. This is due to the likelihood that there would not be a market for the single component, but only for the plant as a whole. The Panel has, in past reports, utilized depreciated replacement cost to value destroyed assets, and it believes that this methodology is particularly appropriate for use when valuing components of manufacturing plants. Under this methodology, the value of the destroyed asset is determined by multiplying the actual replacement cost of the asset by the ratio which the remaining useful life of the destroyed asset (as measured on the day prior to the loss) bears to the original useful life of the destroyed asset. In this regard, the Panel notes that the actual remaining useful life of a destroyed asset prior to the loss may well have exceeded the remaining useful life of the asset as shown on the owner's depreciation schedule. The Panel finds that use of the depreciated replacement cost methodology is appropriate for use in the valuation of KNPC's destroyed assets.

109. The Panel considers that depreciation deductions should also be made from the cost of repairing damaged equipment, but only to the extent that it is determined that the repairs extended the equipment's useful life. The Panel concludes that the repairs made by KNPC to its damaged units did not extend their useful lives. Therefore, the Panel finds that no depreciation deductions are warranted with respect to KNPC's repair costs.

110. The Panel also finds that deductions from replacement costs are appropriate in circumstances where the replaced equipment offers more functional value than did the destroyed asset. Examples of this, in the context of a refinery, might include added storage space, additional processing capacity, better fuel efficiency, improvements in technical or "state-of-the-art" options, or improvements in refinery operating efficiency as a whole, through de-bottlenecking. The Panel has concluded that there was some limited betterment to KNPC's facilities of this sort, and recommendations for appropriate adjustments have been made in such cases, as described in paragraphs 113, 117 and 118 below.

111. As noted in paragraph 64 above, KNPC used competitive bidding procedures in the selection of both the project management consultant and the different construction contractors used for each refinery, whose works were overseen by the project management consultant. Iraq has submitted no evidence in support of its allegation that excessive charges were paid by KNPC to the project management consultant and to those construction contractors. The Panel finds that the rates charged by these contractors were consistent with the market rates prevailing in Kuwait during the claim period.

112. Iraq presented no evidence to substantiate its allegation that KNPC filed claims for equipment that it did not replace. The Panel found no indication, during its review of KNPC's financial records of the refinery restoration project, that expenses were falsely entered on KNPC's books for the purchase of new units. The Panel also inspected selected units, and again found no evidence that the equipment had not been replaced.

5. Adjustments to plant and equipment

113. The Panel has identified betterments in the amount of KWD 7,292,288 that were made to the refinery facilities during the refinery restoration project. Some of the larger value improvements were made to storage tanks at the Shuaiba Refinery and the control room in the MAB Refinery. The Panel finds that this amount must be deducted from KNPC's property damage claim.

114. The Panel finds that, on a limited number of occasions, KNPC claimed replacement costs for destroyed refinery components that did not fully take into consideration the accumulated depreciation of the destroyed property. Consistent with its conclusion that a depreciated replacement cost methodology should be used with respect to the assessment of the value of destroyed property, the Panel concludes that an adjustment must be made in the amount of KWD 18,080,124.

115. KNPC's claim for property damage includes KWD 8,136,590 in costs that were initially paid by KOC to a third-party contractor for work performed as a part of the Al Awda and Al Tameer projects. Subsequent to payment, these costs were transferred from the accounting records of KOC to those of KNPC, by making corresponding credit and debit entries. KNPC contends that these transferred costs relate to repair work performed by the third-party contractor for the benefit of the refineries, rather than the oil production operations and assets that were managed by KOC. In considering this segment of KNPC's property damage claim, the Panel examined the relevant documents filed by KOC as a part of the Panel's earlier "Report and recommendations made by the Panel of Commissioners appointed to review the Well Blowout Control Claim (the 'WBC claim')" (S/AC.26/1996/5/Annex). The Panel also considered supplemental documents produced by KNPC in response to the Panel's article 34 notifications. The Panel confirmed that the transferred costs were not included by KOC in the WBC claim and that these costs did pertain to charges paid by KOC for repairs to refinery assets. The Panel finds that, in the circumstances, the inter-affiliate accounting transfer was appropriate, and KNPC is the proper claimant. However, the Panel determined that KWD 1,887,814 of the transferred costs were recorded by KNPC as maintenance expenses and that KNPC had previously received reimbursement from KPC for this portion of the claimed amount under the interim operating agreement. The remaining KWD 6,248,776 of the transferred costs were recorded as a capital expense

by KNPC. Of this amount, the Panel finds that a depreciation deduction of KWD 3,799,256 must be made, resulting in a total adjustment of KWD 5,687,070 and an award of KWD 2,449,520 for the transferred Al Awda and Al Tameer project costs.

116. The Panel finds that KWD 5,120,518 in costs relating to the refinery restoration project must be excluded from the property damage award because KNPC did not provide adequate documentary evidence in support of these costs.

117. The Panel finds that Local Marketing's MAA Refinery depot, which was under construction on 2 August 1990, was functionally improved during the repair/replacement work, and that certain of the charges for the repair of this facility were for the estimated value of work that had not been completed on 2 August 1990. The Panel finds that a deduction of KWD 3,357,843 must be made for the combination of these items.

118. The Panel finds that KNPC's claim for damages to 20 retail filling stations has been overstated by KWD 3,651,526. This recommended adjustment is due to a combination of betterments (largely for work that was done on items not noted as having been damaged in the initial damage assessment report) and for the inclusion of internal costs for work by Local Marketing's maintenance department, for which KNPC has been separately reimbursed by KPC.

119. The Panel finds that Local Marketing claimed KWD 350,764 for the expenses incurred by its in-house maintenance department in the repair of four of its facilities (Shuwaikh depot, Shuwaikh lube depot, Shuaiba lube oil plant and Shuaiba port bunkering facilities), where these charges had previously been accounted for as an operating expense for which KNPC was reimbursed by KPC. As in other cases, the Panel finds that this constituted a double charge and must be excluded from the property damage claim.

120. Finally, the Panel finds that an adjustment of KWD 586,063 must be made to the amount claimed for damage to property of the Head Office. This finding is based upon the combination of lack of supporting evidence, insufficient depreciation and betterments.

6. Conclusions and recommendations

121. The Panel finds that KNPC's claim for KWD 196,578,475 for damage to plant and equipment must be reduced by a total amount of KWD 44,126,196 for the adjustments described in paragraphs 113 through 120 above, and that KNPC be awarded a total of KWD 152,452,279 for its plant and equipment losses.

D. The claim for tangible property losses

1. Facts and contentions

122. KNPC claims that each of its five business units suffered tangible property losses due to theft and vandalism by Iraqi forces and other circumstances resulting from Iraq's invasion and occupation

of Kuwait in the cumulative amount of KWD 22,811,084, as shown in table 4. The types of items that are included in this portion of the claim include:

(a) Vehicles, furniture, electronic components and other removable equipment ("equipment");

(b) Surplus equipment left on-site following the completion of construction projects that pre-dated Iraq's invasion and occupation of Kuwait ("surplus construction materials");

(c) Manufacturing inventory and supplies, including high-value chemicals and catalysts utilized in the refining process, base oils and additives taken from the Shuaiba lube plant, and inventories of petroleum products, lube oil products, different types of grease, and auto accessories taken from filling stations ("inventory");

(d) Goods in transit to Kuwait that had been purchased but which were never received by KNPC, and for which payments were made by KNPC;

(e) Cash stolen from Local Marketing service stations.

123. Except as stated in paragraph 151, KNPC estimated the extent of its tangible property losses by conducting, where possible, physical inventory counts following the liberation of Kuwait, and by comparing these counts to the stock status reports for the period immediately preceding the invasion. KNPC states that it used average acquisition costs to estimate the value of its losses, and it reduced this amount for depreciation and normal wastage. Where inventory counts were impossible (such as in the case of goods lost in transit and stolen cash), KNPC used alternative methods of valuation.

124. For convenience of discussion, KNPC's claim for tangible property losses has been subdivided into three groupings: loss of equipment, surplus construction materials and inventory items; loss of goods in transit; and loss of cash.

(a) <u>Loss of equipment, surplus construction materials and inventory</u>

125. Each of KNPC's business units has made claims under this category. In summary form, the amounts of these claims are as set out below:

Table 9. KNPC's claim for equipment, surplus construction materials and inventory

Business unit	Revised claim amount (Kuwaiti dinars)
Shuaiba Refinery	
Equipment	1,704,000
Inventory	727,032
MAB Refinery	
Equipment	2,568,000
Surplus construction materials	4,611,000
Inventory	1,449,231
MAA Refinery	
Equipment	1,836,000
Inventory	3,733,253
Local Marketing	
Equipment	1,184,228
Inventory	3,206,593
Head Office	
Equipment	16,000
Inventory	Nil
Total	21,035,337

126. KNPC claims a total of KWD 7,308,228 for equipment allegedly stolen or damaged during Iraq's invasion and occupation of Kuwait. With respect to equipment at the three refineries, KNPC calculated its claim of KWD 6,108,000 based on the estimated replacement cost of the equipment identified as missing in lists prepared by KNPC personnel after 2 March 1991. With respect to equipment located at the premises of Local Marketing and Head Office, KNPC calculated its claim of KWD 1,200,228 based on the estimated replacement cost of the equipment identified as missing on a list prepared by the adjusters from KNPC's fixed assets register.

127. KNPC claims a total of KWD 4,611,000 for surplus construction materials left over from projects at the MAB Refinery that were completed prior to 2 August 1990. KNPC identified the construction materials based on a surplus stock list dated 8 July 1990 that was prepared by KNPC personnel. KNPC calculated its claim based on the estimated value of these items. KNPC has not provided details in support of the claimed amount.

128. KNPC claims a total of KWD 9,116,109 for lost inventory. Its claim includes the following: warehouse supplies (including high-value catalysts used in the refining process); stores of lube oils and lube oil blending stocks; and petroleum products and auto accessories in filling stations.

129. Two separate inventory valuations were conducted: the first by KNPC's own internal staff and a second one later by the adjuster. KNPC valued missing unit items at a moving average acquisition cost (meaning that, for accounting purposes, the value of a newly acquired inventory item was based on the average purchase price of all items of that unit's type that were in stock). Pre-set percentage mark-ups were then added to the average acquisition cost to cover additional costs of inventory acquisition, such as freight costs, customs charges, demurrage, and insurance.

130. KNPC later conducted random price checks of unit valuations, and no significant discrepancies were noted. The Panel repeated that process with the same result.

131. KNPC also made an obsolescence factor adjustment to the values of the lost inventory items. This factor was considered to be the ratio of the quantity of an operating unit's obsolete stock, as compared to the quantity of all of its stock, in the financial year 1989/90, with the numbers for this ratio having been taken from the report of KNPC's external auditors.

132. Finally, KNPC further revised downward the valuations of lost inventory items to reflect the age of the lost inventory items on 2 August 1990 and the average length of time over which the item would have been replaced in a no-invasion scenario.

(b) Loss of goods in transit

133. Each of KNPC's four business units has filed claims under the category of "loss of goods in transit". This claim element is set out in the following table:

Table 10. KNPC's claim for loss of goods in transit

Business unit	Revised claim amount (KWD)
Shuaiba Refinery	319,384
MAB Refinery	211,855
MAA Refinery	1,005,995
Local Marketing	27,713
Total	1,564,947

134. This claim element represents losses of goods for which KNPC had made payment to a vendor, but had not taken delivery on 2 August 1990. KNPC states that most of the items in this category were in port in Kuwait at that time awaiting customs clearance. A smaller portion of these lost goods were in the custody of marine carriers on 2 August 1990, and KNPC believes that these goods were off-loaded by those carriers in adjacent ports after the carriers had determined that delivery could not be made through Kuwaiti ports. In all cases, the goods in question were never received by KNPC. KNPC submits that the loss of the goods was due to either theft or intentional destruction. In either event, KNPC claims that these losses were a direct consequence of Iraq's invasion and occupation of Kuwait.

135. KNPC states that it made payment to external vendors for all of the goods for which it claims compensation under this category. It values its loss at the invoiced amounts that were paid. It states that payments were made on the advice of in-house legal counsel, who confirmed that, in each case, KNPC had accepted the risk of loss in transit under the terms of contracts or purchase orders covering the goods purchased.

136. KNPC provided the Panel with proof of shipment and proof of payment for all transactions with values in excess of KWD 10,000. At the Panel's request, KNPC provided support for some of the transactions under KWD 10,000 at the Shuaiba and MAB refineries; however, it was unable to provide documentation for the transactions at the MAA Refinery.

(c) Loss of cash

137. Local Marketing claims an estimated loss of KWD 210,800 in cash receipts that it contends were taken from the safes and cash registers located in its service stations in Kuwait. The stations were left unattended on 2 August 1990. KNPC assumes that the cash was taken by invading Iraqi troops; but, in any event, it contends that the breakdown of civil order during the period of the Iraqi presence in Kuwait gave rise to the environment in which these thefts were made possible, and that the loss was thus a direct result of Iraq's invasion and occupation of Kuwait.

138. Local Marketing conducted its retail sales on a cash basis, with the exception of some 2,000 commercial customers who were allowed to make purchases on a credit basis. During interviews, Local Marketing's employees described the daily cash and credit receipt handling procedures used in its service stations. These included: cash and credit counts three times per day (after each eight-hour shift); the placement of cash and credit receipts into safes located on the premises of each station; daily pick-up of receipts by a commercial security service; and deposit by the security service of cash (into KNPC's bank accounts) and credit receipts (with Local Marketing's accounting department). 16/ The security service did not collect cash and credit receipts from KNPC's service stations on 2 August 1990. Thus those receipts remained in the station's safes and cash registers after that date.

139. KNPC contends that all of its service stations in Kuwait were vandalized and damaged to some degree during Iraq's invasion and occupation of Kuwait. Following the liberation, it was discovered that the safes and cash registers in all of the stations had been forcibly opened, and all of the contents stolen. Because the credit slips were also placed in the safes, all records for credit sales during the one-day period were missing, as was the cash contained in the safes. Therefore, KNPC states that the precise amount of cash and credit slips lost cannot be determined.

140. KNPC estimated the total of the cash sales made by Local Marketing on the day preceding the invasion by averaging the actual cash receipts of 12, 19 and 26 July 1990, corresponding to the same day of the week as 1 August 1990.

141. KNPC estimated that the credit sales made by Local Marketing during the period totalled KWD 4,929, based on the same methodology as indicated in the preceding paragraph. KNPC included these lost credit sales in its claim for bad debts discussed in section F below.

2. Evidence presented in support of the claim for tangible property losses

142. The evidence presented in support of the claim for tangible property losses was the same as that listed in paragraphs 51 and 52 above.

3. Iraq's response

143. Iraq makes the following arguments with respect to KNPC's claim for tangible property losses.

(a) Iraq's forces did not take part in any looting of the inventories and equipment belonging to KNPC during the invasion and occupation of Kuwait. Whenever it removed inventory or equipment from one of the refineries, it issued receipts to the refinery management, describing the goods that were taken.

(b) The inventory methods used by KNPC were unreliable in that the inventory counts were delayed for several months during which time the lost goods could have been stolen by persons other than Iraqis.

(c) The 5 per cent per annum uplift that KNPC used in the valuation of the replacement cost of its lost stocks was improper, as this percentage exceeded the rate of inflation during the period.

4. Panel findings

144. KNPC provided evidence, in the form of affidavits from its personnel, indicating that Iraqi troops removed large quantities of stores from KNPC's warehouses and other facilities. Those witnesses stated that Iraqi forces gave receipts for these stores during the early stages of the occupation period but later discontinued the practice. Copies of these receipts were provided to the Panel. KNPC states that Iraq never paid any compensation in return for the issued receipts.

145. Following the liberation of Kuwait on 2 March 1991, KNPC's five units conducted separate and complete inventories of their warehouses and premises to determine the extent of their tangible property losses, and KNPC has provided the Panel with the results of those inventories. These losses occurred during, or in the months immediately following, Iraq's invasion and occupation of Kuwait, when KNPC was unable to maintain normal levels of security over its property. In addition, as indicated in paragraph 42 above, Iraqi troops assumed control over the operations of KNPC's three refining units on 2-3 August 1990. For these reasons, the Panel finds that KNPC's tangible property losses were a direct result of Iraq's invasion and occupation of Kuwait.

146. The Panel considers that the inventory counting techniques used by KNPC to assess the extent of its tangible property losses are acceptable. Any delay in the initiation of those counts was a result of the circumstances previously mentioned in paragraph 64 above. The Panel conducted sampling to verify the valuations done by KNPC with respect to its damaged or lost tangible property. The Panel therefore accepts the methodology and valuation techniques employed by KNPC in the preparation of its claim.

147. The freight term (as shown on the shipping documents) for those goods that were lost in transit was "C&F Kuwait". Under this term of shipment, a seller is required to pay for the expense of shipping the purchased goods, and the contract amount is payable upon the seller's presentation to the buyer of shipping documents establishing that the goods were loaded at the port of shipment. Thus, KNPC accepted the risk of loss of the goods in transit, even though it may never have actually taken delivery of the goods for which it had paid.

148. The Panel finds that, with respect to those goods in transit for which KNPC was able to provide shipping records showing C&F terms of sale, KNPC has established that it had a legal obligation to pay for the goods, even though the goods were never received. Furthermore, subject to the adjustment made in paragraph 152 below, the evidence provided by KNPC concerning its payment for, and the non-delivery of, these items is sufficient to support its claim for this category of tangible property loss.

149. The Panel accepts the methodology used by Local Marketing for the computation of the loss of the cash and credit receipts of its service stations for the day preceding the invasion. A determination cannot be made as to who was responsible for the later burglaries of those stations, but the Panel finds that the conditions that allowed for those break-ins were a direct result of Iraq's invasion and occupation of Kuwait.

5. Adjustments to tangible property losses

150. KNPC's refining units made an upward adjustment to their claims for the cost of replacement of missing inventory items by applying a 5 per cent "replacement cost" factor over a total of three years (a compounded increase in the claim of 15.76 per cent). It did so on the grounds that it would take three years, on average, for it to replace the missing items; thus it argues that an inflationary adjustment is warranted. KNPC failed to provide any documentary support for its argument of price increases due to delayed acquisition, such as supplier invoices. The Panel finds that this increase was not substantiated and concludes that an adjustment of KWD 804,544 must be made for this item.

151. KNPC did not provide adequate supporting documentation to establish the prior existence of many items on the refineries' lists of missing equipment. Additionally, KNPC has not identified the method whereby it valued the missing equipment. Finally, because there was no method to tie individual items on the missing equipment list to items on the fixed asset ledger, a possible duplication of awards might occur by inclusion of the items in other parts of the claim. For these reasons, the Panel finds that the entire KWD 6,108,000 claimed by the three refineries for missing equipment must be disallowed.

152. With respect to the loss of goods in transit, KNPC provided supporting documentation for items with values of over KWD 10,000, but it failed to provide supporting documentation for some of the items with values under KWD 10,000. Accordingly, the Panel finds that an adjustment of KWD 269,951 must be made for these items.

153. The MAB Refinery claimed KWD 4,611,000 for surplus materials remaining after the completion of the MAB Refinery expansion project in 1989. This amount greatly exceeds the net

surplus value of these materials, as shown in KNPC's 1991 annual report. KNPC failed to provide evidence supporting its assertion that these stolen materials had a fair market value that was higher than the depreciated value shown on its books. Based on the losses experienced by the other refineries, and the types of surplus material that were left behind after the MAB Refinery expansion, there is reason to question whether all of the materials were actually stolen. For all of these reasons, the Panel finds that an adjustment of KWD 3,434,334 must be made for this category of the claim.

154. In its 1993 financial statement, KPC reported a loss of only KWD 94,593 for cash stolen from the retail filling stations in 1990, a significantly smaller amount than the KWD 210,800 claimed by Local Marketing. Local Marketing has not provided a satisfactory explanation for this discrepancy. Consequently, the Panel finds that an adjustment of KWD 116,207 must be made and that KNPC must be awarded the lower amount of KWD 94,593.

155. The Panel finds that an adjustment in the amount of KWD 45,973 must be made to the claim for furniture stolen or destroyed at Local Marketing's Sabhan depot because the estimated replacement cost was not adjusted for pre-invasion depreciation of the property.

156. KNPC seeks the full repair cost of a heavily damaged fuel barge, and it seeks replacement cost for an identical fuel barge that was never recovered. Given the age of both barges on 2 August 1990, the Panel finds that the calculation of damages must be based on their book values. Accordingly, it concludes that an adjustment of KWD 31,516 must be made.

157. Local Marketing and the Head Office unit were unable to provide supporting documentation showing the original purchase dates of missing vehicles and mobile plants, nor have they provided substantiating data showing re-purchase costs. The Panel therefore concludes that a combined adjustment of KWD 931,411 must be made for this component of the claim.

6. Conclusions and recommendations

158. The Panel finds that KNPC's claim for KWD 22,811,084 for tangible property losses must be reduced by a total of KWD 11,741,936 for the adjustments described in paragraphs 150 through 157. The Panel therefore recommends that KNPC be awarded a total of KWD 11,069,148 for its tangible property losses.

E. The claim for cost overruns

1. Facts and contentions

159. KNPC claims damages totalling KWD 1,607,593 for increases in the cost of completing certain construction projects, which were under way or planned at the time of Iraq's invasion and occupation of Kuwait ("cost overruns"). Local Marketing's claim for cost overruns is summarized in the following table:

Table 11. KNPC's claim for cost overruns

(Kuwaiti dinars)

Business Unit	Contract cost (pre-invasion)	Actual cost (post-invasion)	Revised claim amount
Local Marketing	3,081,245	4,688,838	1,607,593

160. KNPC's claim for cost overruns pertains only to the expansion of Local Marketing's retail filling station network in Kuwait. Prior to Iraq's invasion and occupation of Kuwait, KNPC had entered into four separate contracts for the construction of ten new filling stations and the dismantling and rebuilding of an eleventh station. None of the work had commenced by 2 August 1990.

161. As a result of Iraq's invasion and occupation of Kuwait, KNPC cancelled each of the contracts, effective as of 2 August 1990, on the basis of the force majeure provisions in these contracts.

162. Following the liberation of Kuwait, and the eventual resumption of its business activities, Local Marketing revised its construction budget and executed new construction contracts for the same work at higher rates. KNPC contends that the post-liberation prices for these projects increased as a result of inflationary factors and the increase in market demand in Kuwait for construction services.

163. KNPC contends that, as a result of Iraq's invasion and occupation of Kuwait, it was required to spend KWD 1,607,593 more for the completion of the work described in paragraph 160 than it would have spent had it not been forced to cancel the four contracts. KNPC calculated its damages by subtracting the original contract amounts from the actual costs that it incurred in the completion of the work covered by those original contracts.

2. Evidence presented in support of the claim for cost overruns

164. The evidence that was presented in support of the claim for cost overruns was the same as that listed in paragraphs 51 and 52 above.

3. Iraq's response

165. Iraq notes that KNPC's retail distribution network in Kuwait was quite small on 2 August 1990, and it questions whether there was a real intent to expand the network through the construction of new filling stations. By implication, therefore, it suggests that KNPC's plan for the expansion of its retail outlets was not considered to be a viable project until after the liberation.

4. Panel findings

166. The Panel has considered similar types of claims in earlier instalments. On those occasions, the Panel concluded that cost overruns on construction projects that were occasioned by delays directly resulting from Iraq's invasion and occupation of Kuwait may be compensable even though the construction work had not yet commenced on 2 August 1990. However, the Panel limited this rule to

situations where the claimant could establish that it had made a demonstrable cost commitment to the project before the invasion. 17/

167. KNPC presented evidence that it had made such a commitment by entering into construction contracts for the work at issue, and it further showed that it was forced to exercise its contractual rights of cancellation when it became apparent that the work could not go forward. KNPC also presented evidence of the actual cost of completing these construction projects. KNPC claims the amount by which its actual completion costs exceeded its original contractual commitments. The Panel concludes that the evidence supports KNPC's claim for cost overruns.

168. The Panel finds that KNPC would have allowed the construction work to go forward in a no-invasion scenario. The potential legal liability to which KNPC might have been exposed, had it cancelled the construction contracts without cause, would have provided a significant deterrent to such unilateral action. The Panel also notes that there is significant further evidence that supports the conclusion that KNPC would have gone forward with the original contracts in a no-invasion scenario.

169. During the Panel's claim investigation, Local Marketing representatives stated that, both prior to Iraq's invasion and occupation of Kuwait, and after the rehabilitation of its facilities, its retail customers were often forced to wait for significant periods at many of its retail outlets to fill their cars with gasoline. Furthermore, KNPC presented evidence to show that its sales of refined products in Kuwait have increased since 2 March 1991. Both these factors indicate that, prior to 2 August 1990, KNPC had a business purpose for expanding the number of its retail outlets.

5. Conclusions and recommendations

170. The Panel finds that, as a direct result of Iraq's invasion and occupation of Kuwait, KNPC incurred additional costs in the amount of KWD 1,607,593 for the construction and rehabilitation of eleven retail marketing outlets. It therefore finds that KNPC must be awarded compensation in this amount.

F. The claim for bad debt losses

1. Facts and contentions

171. KNPC claims KWD 225,000 in bad debt expenses ("bad debts") for credit losses that it alleged arose as a result of Iraq's invasion and occupation of Kuwait. The amounts were owed to Local Marketing for credit charges of the sort described in paragraph 138 above. KNPC contends that all of the credit charges giving rise to bad debts were made prior to 2 August 1990, but that none of these purchases had been made more than 90 days before that date.

172. In its statement of claim, KNPC said that it had classified these overdue amounts as being bad debts because it concluded that the customers had left Kuwait, or alternatively that the customers' financial circumstances had been reduced to the extent that they were unable to pay their debts as a direct result of Iraq's invasion and occupation of Kuwait. It also said that collection efforts by legal

means had been discontinued on the advice of in-house legal counsel because it was felt that expenditures for legal actions would not prove to be cost effective.

2. Panel findings

173. The Panel considers that bad debts of Kuwaiti creditors who are owed amounts by Kuwaiti debtors are compensable in principle, but only to the extent that it can be specifically proven that the debtor was rendered unable to pay its debts as a direct consequence of Iraq's invasion and occupation of Kuwait. 18/

174. KNPC satisfied certain aspects of its burden of proof with respect to this portion of its claim. It showed that it expended a reasonable effort to collect these bad debts. The fact that KNPC has, in the intervening period since filing its claim, collected some 70 per cent of the amount originally owed, is convincing evidence of the diligence of its efforts in this respect. KNPC stated that it followed in-house legal advice that filing legal actions against the remaining debtors would not be cost effective, and it confirmed that it has not reached a financial settlement with these debtors. However, KNPC has not satisfied the full range of requirements necessary to satisfy its burden of proof. Specifically, KNPC has failed to provide the Panel with any evidence that links the debtors' failure to pay the amounts owed to KNPC to individual circumstances caused by Iraq's invasion and occupation of Kuwait.

3. Conclusions and recommendations

175. The Panel finds that no amount should be awarded to KNPC for its claim for bad debts.

G. Summary of Panel's recommendations

176. A compilation of the Panel's recommendations on all five elements of the KNPC claim is shown in table 12 below.

Table 12. KNPC claims – total recommended compensation

(Kuwaiti dinars)

Claim element	Revised claim amount a/	Panel adjustments	Panel recommendations
Business interruption (loss of profits plus actual operating costs)	443,901,787	148,136,911	295,764,876
Plant and equipment damage	196,578,475	44,126,196	152,452,279
Tangible property	22,811,084	11,741,936	11,069,148
Cost overruns	1,607,593	Nil	1,607,593
Bad debts	225,000	225,000	Nil
Total	665,123,939	204,230,043	460,893,896

a/ The original claim amount, as shown in paragraph 4 and table 1 above, was KWD 678,461,603.

IV. INCIDENTAL ISSUES

A. Currency exchange rate

177. The Panel notes that the claimant has advanced its claim in a currency other than United States dollars. The Panel has assessed the claim in the currency originally claimed. However, the Commission issues its awards in United States dollars. Accordingly, the Panel has been required to determine the appropriate United States dollar exchange rate to apply to the recommended award.

178. The Panel also notes that most prior Commission compensation awards have relied on the United Nations Monthly Bulletin of Statistics for determining commercial exchange rates into United States dollars. The Panel adopts such an approach for this report.

179. In the circumstances, the Panel finds that the appropriate currency exchange rate to be applied to the claims advanced in this part of the seventh instalment in currencies other than the United States dollars is the rate prevailing on the date of loss, as outlined in paragraphs 183 below.

B. Interest

180. All claim figures in this report are net of any individual interest claims advanced by the claimant.

181. In accordance with Governing Council decision 16 (S/AC.26/1992/16, para.1), "[i]nterest will be awarded from the date the loss occurred until the date of payment, at a rate sufficient to compensate successful claimants for the loss of use of the principal amount of the award". The Governing Council further specified that "[i]nterest will be paid after the principal amount of awards", while postponing a decision on the methods of calculation, and the rate and the details of payment of interest. 19/

182. The task of the Panel, therefore, is to determine from which date interest will run for the successful claimant.

183. In each instance where a precise date of loss is apparent or discernible, the Panel finds that day to be the date from which interest will run. In some instances, a precise date of loss cannot be established. In those cases, the Panel has been guided by relevant principles set forth in the Report and recommendations made by the Panel of Commissioners concerning the first instalment of "E2" claims. 20/ In particular, where the claim is for a loss of profit (such as KNPC's business interruption claim), where that loss was incurred over a period of time, the Panel has selected the mid-point of the period. The Panel believes that this rationale should likewise apply to claims for cost overruns by selecting the midpoint between 2 August 1990 and the date of completion of the delayed project for which the extra cost has been claimed. Finally, where the claim is for a loss of real property or tangible assets, the Panel has selected 2 August 1990 (the date of Iraq's invasion of Kuwait) as the date of the loss, as that coincides with the claimant's date of loss of control over the assets in question.

C. Claim preparation costs

184. All claim figures in the body of this report are net of any claim preparation costs advanced by the claimants. In a letter dated 6 May 1998, the Panel was notified by the Executive Secretary of the Commission that the Governing Council intends to resolve the issue of claim preparation costs at a future date. Accordingly, the Panel takes no action with respect to claims for such costs.

Table 13. Currency exchange rate and interest

Claim element	Recommended compensation (KWD)	Currency conversion rate	Recommended compensation (USD)	Interest start date
Business interruption	295,764,876	3.41	1,008,558,227	15 July 1992
Plant and equipment damage	152,452,279	3.46	527,484,885	2 August 1990
Tangible property	11,069,148	3.46	38,299,252	2 August 1990
Cost overruns	1,607,593	3.39	5,449,740	15 April 1992
Bad debts	Nil	n/a	Nil	n/a
Total	460,893,896		1,579,792,104	

V. RECOMMENDATIONS

185. The following table summarizes the Panel's recommended compensation:

Table 14. Panel's recommended compensation

Claimant	Original claim amount (KWD)	Recommended compensation (KWD)	Recommended compensation (USD)
Kuwait National Petroleum Corp.	678,461,603	460,893,896	1,579,792,104

Geneva, 26 October 2001

(Signed) Mr. Allan Philip
Chairman

(Signed) Mr. Antoine Antoun
Commissioner

(Signed) Mr. Michael Hwang
Commissioner

Notes

1/ This reduction of KWD 13,337,664 can be largely attributed to a decrease in the actual cost of repairing damage to the plant and equipment of two of the three refineries (as compared to KNPC's original estimate of this cost), and to a decrease in the total amount claimed for the category of tangible property losses. KNPC reduced the amount claimed for cost overruns, again because the actual cost of completing the work proved to be less than anticipated. The amount claimed for bad debts was also reduced to reflect KNPC's success in collecting the debts after filing its claim. These reductions in the amounts claimed were partially offset by an increase in the amount of the actual cost of repairing damage to the plant and equipment of the MAA Refinery and of the Local Marketing facilities (again, as compared to the original estimate of this cost).

2/ The annual profitability of KNPC's three refineries was determined by the size of a transfer payment made each year by KPC to KNPC in the form of processing fees.

3/ This Panel made use of the term "no-invasion" in its "Report and recommendations made by the Panel of Commissioners concerning the fourth instalment of 'E1' claims" (S/AC.26/2000/16) ("the Fourth 'E1' Report"), paragraph 6 as follows: "As used by the claimants, as well as by the Panel in this report, the use of the term "no-invasion" to describe a figure means that the figure described is an estimate of what that figure would have been if Iraq had not invaded and occupied Kuwait in 1990/91". The same methodology is applied by the Panel in the current report.

4/ KNPC's financial year ran from 1 July of each year through 30 June of the following year.

5/ The base component of the processing fee (110 per cent of a refinery's beginning-of-year budget) was subject to upward or downward adjustment depending on the refinery's efficiency in the performance of certain contractual criteria. Those criteria were: amounts of lean gas burned by the refinery (reductions below a threshold level resulted in an increase in the amount of the processing fee and excessive burning of lean gas resulted in a decrease in the amount of the processing fee); amount of crude throughput (higher than planned-for refinery utilization resulted in an increase in the amount of the processing fee); and changes by KPC in the product-mix that was initially agreed for a refinery in its beginning-of-year budget (allowing for an increase in the processing fee if more higher-value products were produced by KNPC at KPC's direction).

6/ Paragraph 17.2 of the processing agreement states as follows: "Each party shall be entitled to terminate the agreement upon such terms as may be agreed between the parties hereto or authorised in writing by the Minister of Oil." The processing agreement was terminated on 2 August 1990. At the conclusion of the 1990/91 financial year, during which it became apparent that the refinery restoration project would not be completed and the refineries would not be restored for some appreciable time, the parties agreed that their contractual relationship for financial years 1991/92 and 1992/93 would be defined by an interim processing agreement whereby KPC reimbursed KNPC for its actual operating expenses, without allowance for a profit margin. That interim arrangement was later extended to include the final year of the claim period (1993/94).

7/ KNPC stored its bulk refined products in storage facilities located adjacent to the refineries. Local Marketing supplied its service stations with products stored in these facilities. During the occupation of Kuwait, Iraqi military forces controlled these storage facilities, and Local Marketing was prevented from resupplying the service stations with petroleum products. Thus, when a service station exhausted its on-site supply, it was forced to discontinue operations. Iraq alleges that it caused a number of Local Marketing's service stations to remain open throughout the period of its invasion and occupation of Kuwait, but it did not state the identity of the recipients of the revenue derived from sales made during this time. Local Marketing contends that it did not receive any revenue from Iraq for sales made during the period.

8/ These debit notes served to transfer from KOC to KNPC a small portion of the overall cost paid by KOC to its external project manager for the Al Awda and Al Tameer projects. KNPC includes this amount of the debit notes as a part of its claim for damage to plant and equipment, as set forth in section C of this report. KNPC says that only those costs that pertained to work done by KOC's project manager, under the aegis of the Al Awda and Al Tameer projects, and which provided direct benefit to the refinery restoration project, were transferred to it in this manner.

9/ Iraq raised several new issues at the oral proceedings that had not been included in its written comments. The Panel considered each of these issues in its analysis.

10/ The Fourth "E1" Report, paragraph 252.

11/ The total claimed by KNPC's three refineries for business interruption loss is KWD 440,329,662, or approximately 1,523,540,630 United States dollars (USD) (based on an exchange rate chosen by the claimant of KWD 1 = USD 3.46). KPC deducted from its business interruption claim, considered in the Fourth "E1" Report, USD 2,022,000,000 in cost savings that it realized due to a reduction in the amount of its processing fee payments to KNPC during the claim period. The calculations by the two claimants in formulating their respective business interruption claims were based on the same components of processing fees and costs.

12/ See the Fourth "E1" Report, paragraph 253.

13/ Because the useful life of a manufacturing plant should equal its expected operating life, the rate of depreciation of the plant should slow during extended periods of non-use. However, depreciation based solely on the anticipated level of a plant's usage would not take into account any subsequent diminution in the operating life of the plant caused by unexpected physical damage of the sort suffered by KNPC's three refineries. Nevertheless, the Panel has considered the fact that KNPC physically restored its three refineries to their pre-existing condition (KNPC makes claim for the cost of that restoration in section C of this report). Thus, the remaining useful lives of the three refineries, post-restoration, may have approached their remaining useful lives, as measured on 1 August 1990.

14/ See note 8 above.

15/ See paragraph 6(a) of Governing Council decision 7.

16/ This security service filed a separate claim with the Commission that was considered by another Panel. (See the "Report and recommendations made by the Panel of Commissioners concerning the sixteenth instalment of 'E4' claims" (S/AC.26/2001/23)). The Panel reviewed the relevant documents (such as the vault log) submitted by that security service in its separate claim and thereby verified certain elements of KNPC's claim for loss of cash and credit receipts.

17/ S/A.26/1999/10, para. 266.

18/ See "Report and recommendations made by the Panel of Commissioners concerning the first instalment of 'E2' claims", (S/AC.26/1998/7), paragraph 145 and the "Report and recommendations made by the Panel of Commissioners concerning the fifth instalment of 'E2' claims" (S/AC.26/2000/17), paragraph 75.

19/ S/AC.26/1992/16, para. 1.

20/ S/AC.26/1998/7, paras. 276-287.
