IN THE MATTER OF AN INTERNATIONAL ARBITRATION
UNDER ARTICLE 10 OF THE PARTIES' CONTRACT NO 54-02/90159

FIRST PARTIAL FINAL AWARD

(rendered on 22 June 2007
Stockholm, Sweden)

PALMCO CORPORATION
(USA: "Palmco")

Claimant and
Respondent to Counterclaim

- and -

JSC TECHSNABEXPORT
(Russian Federation: "Tenex")

Respondent and
Counterclaimant

THE ARBITRAL TRIBUNAL:

Dr Robert Briner,
Jan Paulsson Esq; and
V.V.Veeder Esq (President)

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PART A: INTRODUCTION

(01) The Parties

1. *Palmco:* The Claimant and Respondent to Counterclaim, as "the Customer", is Palmco Corporation, of 5000 Birch Street, Suite 4700, Newport Beach, California 92660, USA ("Palmco"). It is a corporation organised under the laws of the State of California, USA. Palmco's business consists in the supply of non-weapons-grade uranium products and services for use in civilian nuclear power plants in the Republic of Korea. Palmco was formed in 1976 by Mr Y.J. Shin and Mr Sung C. Kim, both Korean nationals and citizens of the USA. Mr Shin was Palmco's Vice-President from 1976 to 1991 and thereafter its President to 1998. His successor as Vice-President and President, respectively, was and remains Mr J.W. Lee. Ms Injoa Kim is currently Palmco's Chief Financial Officer.

2. Palmco was represented in these arbitration proceedings by Michael G. Yoder Esq, of O'Melveny & Myers LLP, 610 Newport Center Drive, Suite 1700, Newport Beach, California 92660-6429, USA.

3. *Tenex:* The Respondent and Counterclaimant, as the "Supplier", is JSC Techsnabexport, of 26 Staromonetniy Per., 119180 Moscow, Russian Federation. It is a joint stock company organized under the laws of the Russian Federation and wholly owned by the Ministry of Property Relations of the Russian Federation. The Respondent is the legal successor under Russian law to V/O Technsnabexport, 26 Staromonetniy Per., Moscow, U.S.S.R, an All-Union foreign trade organisation

formed in Moscow under Soviet law and wholly owned by the USSR (both entities here collectively called "Tenex", unless indicated otherwise). Tenex has been involved in the nuclear fuel cycle business since 1963 and in exports of uranium from the USSR and the Russian Federation since 1973. Its senior officers from 1987 onwards included Mr A.A. Grigoriev, Mr A.A. Shiskin, Ms L.M. Zalimskaya and Mr S.N. Pluzhnik.

4. Tenex was represented in these arbitration proceedings by Sigvard Jarvin and Carroll Dorgan Esqs, of Jones Day, 120 rue du Faubourg Saint-Honoré, 75008 Paris, France. From 22nd August 2006 onwards, Tenex was also represented by Timur Aitkulov Esq of Clifford Chance CIS Limited, 7th Floor, 24/27 Ul. Sadovaya-Samotechnaya, Moscow and Egishe Dzhazoyan Esq, of ZAO "UK PROF" , 11 Pozharskiy Per., 119034 Moscow, both of the Russian Federation.

(02) Third Persons

5. *KEPCO & KHNP:* The Korea Electric Power Company ("Kepco") and the Korea Hydro and Nuclear Power Company Limited ("KHNP"), both of the Republic of Korea, have been Palmco's customers since 1988 for enriched uranium product ("EUP") for use as a fuel in their civilian nuclear power plants in the Republic of Korea. Kepco was Palmco's initial customer which later transferred its contracts with Palmco to KHNP, its associated company. Neither Kepco nor KHNP are parties to these arbitration proceedings.

6. In 1988, the USSR and the Republic of Korea had no diplomatic relations and limited commercial dealings, conducted through intermediaries. The Russian Federation and the Republic of Korea established diplomatic relations later, in late 1991. This important political and diplomatic background explains why Palmco, as a United States entity owned and controlled by United States citizens, was at first able and

required to act as an intermediary, albeit as a principal and not as an agent, between Tenex and Kepco/KHNP. From early 1992 onwards, the reasons for such intermediation began to disappear.

(03) The Parties' Disputes

7. There are three distinct contractual disputes between the Parties arising from their Contract Numbered 54-02/90159 made on 28th December 1988, as amended (the "Main Contract): (a) the Option Issue; (b) the Late Delivery Issue; and (c) the Late Payment Issue, in addition to the further issues regarding Interest and Legal and Arbitration Costs.

8. The Main Contract's subject-matter is Enriched Uranium Product, or "EUP". It is the product from which fuel is produced for most nuclear reactors in civilian use. The process begins with mining uranium ore, from which uranium oxide is recovered. That semi-refined product contains natural uranium with three radioactive isotopes, of which the U-235 isotope has the greatest value for generating EUP. The proportion of U-235 isotope found in such natural uranium must next be increased through enrichment to a higher concentration, whereby the assay reaches between 1.3 percent and 5.0 per cent by weight. The result is enriched uranium hexafluoride, being the "Final Product" to be delivered by Tenex to Palmco under their Main Contract for onward sale and delivery by Palmco to Kepco and KHNP.

(A) The Option Issue

9. As regards the Option Issue, Palmco formally claims that the Tribunal (i) decide that Palmco has the option to purchase annually up to one hundred (metric) tonnes of EUP

of 1.0 per cent to 4.5-per cent assay pursuant to the Main Contract; (ii) order Tenex to deliver to Palmco, not later than six months from the date that Palmco shall request delivery following the issuance of the Tribunal's award, sixty tonnes of EUP of 4.5-per cent assay (being the total quantity of Palmco's unfulfillled orders for the 1996 delivery year) at the price of US $850.11 per KgU pursuant to the terms of the Main Contract; and (iii) declare that Palmco continues to possess an option to purchase up to one hundred tonnes of EUP annually at assays ranging from 1.0 percent to 4.5 percent during the years 2007, 2008 and 2009, pursuant to the terms of the Main Contract.

10. Tenex denies all liability in respect of Palmco's claim under the Option Issue. It submits that there is no such option for the Main Contract's renewal period of 2000 to 2009. Specifically, Tenex formally requests the Tribunal to dismiss all of Palmco's claims and requests on their merits or, alternatively, with respect to Palmco's request that the Tribunal order Tenex to perform an alleged obligation to supply Palmco with up to 100 tonnes of EUP in 2006, to dismiss such request on the basis that it is moot. Subsidiarily, Tenex maintains that, if it is required to deliver any quantities under an "option", the price for those optional quantities should be determined in accordance with current market prices and not the contractual price.

(B) The Late Delivery Issue

11. Palmco claims that Tenex wrongfully delayed deliveries in March and June 2005 in breach of the Main Contract, resulting in liquidated damages payable by Tenex to Palmco under Article 13.1 of the Main Contract in the sum of US $1,210,440.66 for the March late delivery and in the sum of US $112,313.91 for the June late delivery, totalling US $1,322,754.57. Palmco also alleges wilful breach by Tenex resulting in a liability under Swedish law for actual resulting damages, not thereby limited by liquidated damages under the Main Contract but extending to compensation in the

greater sum of US $1,485,955.03 payable by Palmco to KHNP pursuant to Article 5.2.2 of Palmco's contract with KHNP.

12. Accordingly, Palmco formally claims that the Tribunal (i) decide that Tenex breached the Main Contract in wrongfully delaying these two deliveries; (ii) order Tenex to pay to Palmco actual damages of US $1,485,955.03; or alternatively to the latter claim (iii) order Tenex to pay to Palmco liquidated damages in the amount of US $1,322,754.57; and (iv) order Tenex to pay to Palmco interest on either of these principal sums from 27th June 2006 until full payment in accordance with Sections 4 and 6 of the Swedish Interest Act.

13. Tenex denies all liability in respect of Palmco's claim under the Late Delivery Issue. Specifically, Tenex formally requests the Tribunal to dismiss all of Palmco's claims and requests on their merits.

(C) The Late Payment Issue

14. Tenex counterclaims against Palmco the sum of US $124,549.82 (plus interest in accordance with the Swedish Interest Act) for Palmco's breach of Article 7.2 of the Main Contract and Article 3(b) of Addendum No 15 in paying for the 31st March 2004 delivery of EUP late on 1st June 2004.

15. Palmco denies all liability for this counterclaim. Palmco formally requests the Tribunal to dismiss Tenex's Counterclaim on the merits and to deny Tenex any of the relief it requests from the Tribunal.

(D) Legal and Arbitration Costs

16. Palmco requests an order, pursuant to Article 10.4 of the Main Contract (set out below, at page 13) that the costs of the arbitration be borne by Tenex and accordingly that Tenex compensate Palmco for its costs of arbitration, including amounts paid to the Tribunal for its fees and expenses, as well as attorneys' and experts' fees and expenses and other costs incurred by Palmco in connection with these proceedings.

17. Tenex requests an order that Palmco should bear in full all the costs of the arbitration pursuant to Article 10.4 of the Main Contract and that Palmco compensate Tenex for its costs of the arbitration, including all amounts paid to the Tribunal for its fees and expenses, as well as attorneys' fees and expenses and other costs incurred by Tenex.

(04) The Parties' Other Disputes

18. The Tribunal is not here concerned with the Parties' other disputes, arising under their Inventory Contract, the U308 Contract and the Conversion Services Contract. The Tribunal was informed that these disputes were referred to separate arbitration proceedings. Nothing determined (or not determined) in this Award is intended by the Tribunal to affect howsoever the Parties' rights and obligations under these other contractual arrangements.

(05) The Parties' Interim Arrangements

19. As indicated above, the Main Contract subsists between the Parties and will continue to subsist until its term's expiry in 2009. This dispute and arbitration affect its

performance by both Parties. The Parties have therefore made certain interim arrangements pending the resolution of their dispute. As regards deliveries for 2006 and 2007 under the Main Contract, the Tribunal understood that the position is as follows:

20. *Delivery Year 2006*: Palmco requested EUP deliveries in 2006 amounting to a total of 10 tonnes @ 4.5% assay. Tenex did not accept Palmco's complete order. Referring to the Main Contract's Addendum No 21, Tenex maintained that Palmco was entitled to a maximum of 40 tonnes @ 4.5% in 2006. The Parties concluded an Addendum No 35 of 18th January 2006 [CX 114], providing for deliveries amounting to 40 tonnes at 4.5% assay (equivalent to slightly less than 60 tonnes @ 3.5% assay) in 2006, while reserving their respective rights. The Tribunal was informed that deliveries according to that Addendum No 35 were completed by the Parties.

21. Specifically, for the year 2006, Tenex made the following deliveries to Palmco under Addendum No 35 to the Main Contract:

April	14,640 KgU	4.5 % assay
June	8,2000 KgU	4.5 % assay
August	7,420 KgU	4.5 % assay
October	9,740 KgU	4.5 % assay

22. In addition to the quantities summarized above, the Parties disagreed over Palmco's right to delivery of any of the following quantities of EUP, which Palmco had ordered for delivery in 2006 but which Tenex declined to supply:

November	23,060 KgU	4.5 % assay
December	36,940 KgU	4.5 % assay

23. *Delivery Year 2007*: Palmco again requested EUP deliveries amounting to 100 tonnes of EUP @ 4.5% assay in 2007. Tenex again rejected the complete order on the

grounds that Palmco was entitled to no more than 40 tonnes of EUP @ 4.5% assay in 2007. While reserving their respective position, the Parties are currently negotiating a delivery schedule for 2007 (as at December 2006).

24. Specifically, Palmco has ordered the following quantities of EUP for delivery in the year 2007:

January	25,997 KgU	4.5 % assay
February	11,483 KgU	4.5 % assay
April	2,520 KgU	4.5 % assay
December	60,000 KgU	4.5 % assay

25. Tenex has declined to accept Palmco's order, and has proposed the following schedule of deliveries:

April	25,997 KuG	4.5 % assay
May	14,003, KgU	4.5 % assay

26. The Tribunal notes that certain of these figures may be imprecise and/or superseded by recent events. In any event, it is necessary to return to these interim arrangements later in Part I of this Award (page 67).

PART B: THE ARBITRATION

(01) The Parties' Arbitration Agreement

27. The Parties' written arbitration agreement is contained in Article 10 of their Main Contract. It provides (with square sub-paragraph numbers here added for ease of reference later in this Award):

> "*10.1 All disputes and differences which may arise out of the present Contract or in connection with it, are to be settled by arbitration without recourse to law court [sic]. This does not concern the disputes and differences which are to be settled in accordance with Article 8 of the present Contract.*
>
> *10.2 Arbitration is to established in the following way:*
>
> *[1] The Party which desires to refer a dispute or difference to arbitration is to inform about it [to] the other Party by a registered letter stating the name and surname of the arbitrator who can be a citizen of any country, his address as well as the subject of the dispute, number and date of the Contract. The other Party not later than 30 days upon receipt of the said letter is to appoint [the] second arbitrator who also may be a citizen of any country informing the first Party of his name and surname and address also by a registered letter.*
>
> *[2] Should the Party summoned to arbitration fail to appoint the second arbitrator within the indicated period, the arbitrator for this Party shall be appointed at the request of the other Party by the Stockholm Chamber of Commerce.*

[3] The appointment is to be made not later than 30 days upon the receipt of the corresponding notification.

[4] Both arbitrators are to appoint the third arbitrator as the chairman not later than 30 days after the appointment of the latter [sic] of them. If the arbitrators within the above time fail to come to an agreement in respect of the chairman, the latter,[sic] shall be appointed at the request of either Party by the Stockholm Chamber of Commerce.

10.3 The seal [sic: seat] of the arbitration will be Stockholm, Sweden. The arbitration [sic: tribunal] establishes his [sic: its] procedure by itself.

10.4 [1] The arbitration award shall be adopted by the majority of votes in conformity with the terms and conditions of the present Contract and the rules of Swedish Law.

[2] The award shall be motivated and shall contain instructions about the distribution of expenses under the arbitration, about composition of the arbitration time and place of the submission of the award.

[3] The arbitration award is to be submitted within 6 months from the date of election or appointment of the chairman and the award is to be final and binding upon both Parties."

By consent of the Parties, as first expressed by Palmco's email dated 17th May and Tenex's email dated 16th May 2006 in answer to Dr Briner's email of 11th May 2006, the time-limit of six months in Article 10.4 [3] of the Main Contract was not enforced by the Parties and the Tribunal; and, by consent of the Parties, it was extended by the Tribunal up to and including the date of this Award.

28. It was agreed at the First Procedural Meeting on 13th June 2006 that the Parties and the Tribunal could be guided, as to general principles, by the IBA Rules on the Taking of Evidence in International Commercial Arbitration. (This agreement was made by Tenex on the basis it was not thereby agreeing any "discovery or any other procedure for the production of documents": see (inter alia) its letter dated 26th June 2006).

(02) Applicable Laws

29. ***Swedish Law:*** By Article 9.1 of the Parties' Main Contract, it was agreed that the Contract "shall be governed in all respects by the material law of Sweden".

30. ***The CISG:*** It is common ground that Swedish law incorporates the 1980 United Nations Convention on Contracts for the International Sale of Goods, the "CISG", by a Swedish Act on Promulgation (SFS 1987:822). The Tribunal addresses below whether the CISG applies directly (as Palmco contends) or indirectly (as Tenex contends). Article 7(1) of the CISG provides that, in the interpretation of the CISG, "regard is to be had to its international character and to the need to promote uniformity in its application and the observance of good faith in international trade." Article 7(2) provides that questions concerning matters governed by the CISG not therein expressly settled are to be settled (inter alia) "in conformity with the general principles on which it is based", thereby including the general regard for the observance of good faith in international trade.

31. ***The Interest Act:*** It is also common ground between the Parties that this Tribunal has powers, as a matter of Swedish substantive law and as the lex loci arbitri, to award interest under the Swedish Interest Act (SFS 1975:635).

32. ***The 1999 Act***: Given the Arbitration Agreement and particularly the consensual seat, or legal place, of the arbitration in Stockholm and its Swedish venue, it is common ground that this arbitration and award are subject to the Swedish Arbitration Act 1999.

(03) The Arbitration Tribunal

33. By its Request for Arbitration of 24th February 2006 (paragraph 24, at page 15), Palmco appointed as its Co-Arbitrator under the Parties' Arbitration Agreement Dr Robert Briner, of Lenz & Staehelin, Route du Chêne 30, CH-1208 Geneva 17, Switzerland.

34. By letter dated 19th April 2006, Tenex appointed as its Co-Arbitrator under the Parties' Arbitration Agreement Jan Paulsson Esq, of Freshfields, Bruckhaus Deringer, 2-4 rue Paul Cézanne, 75375 Paris Cedex 8, France.

35. On 22nd May 2006, the two Co-Arbitrators appointed as Third Arbitrator and President V.V.Veeder Esq, of Essex Court Chambers, 24 Lincoln's Inn Fields, London WC2A 3EG, United Kingdom.

36. By Terms of Appointment agreed by Palmco and Tenex on 25th and 26th October 2006, the Parties each confirmed (inter alia) their acceptance that the Tribunal had been validly established in accordance with the Parties' Arbitration Agreement.

(04) The Arbitral Procedure

37. ***Written Pleadings*** The Parties written pleadings comprised: (i) Palmco's Request for Arbitration dated 24th February 2006; (ii) Tenex's Reply and Counterclaim dated 9th June 2006; (iii) Palmco's Statement of Claim of 27th June 2006; (iv) Palmco's Reply to Tenex's Counterclaim of 27th June 2006; (v) Tenex's Statement of Defence and Counterclaim of 22nd August 2006; (vi) Palmco's Reply in Support of Claims (originally misnamed "Rejoinder") of 18th September 2006; (vii) Palmco's Statement of Defence to Tenex's Counterclaim; (viii) Tenex's Rejoinder of 16th October 2006; (ix) Palmco's Rejoinder to Tenex's Counterclaim of 1st November 2006; and (x) Tenex's Rebuttal on the Counterclaim of 10th November 2006.

38. ***Written Testimony***: Palmco's written factual and expert testimony comprised: (i) Mr Y.J. Shin's First Witness Statement dated 18th September 2006; (ii) Mr J.W. Lee's First, Second and Third Witness Statements dated 18th September, 1st November and 2nd November 2004; (iii) Dr Julian J Steyn's First and Second Expert Reports dated 18th September and 2nd November 2006; and (iv) Professor Erik Nerep's First and Second Legal Opinions dated 18th September (as corrected) and 10th December 2006.

39. Tenex's written and factual testimony comprised: (v) Ms L.M. Zalimskaya's Witness Statement dated 16th October 2006; (vi) Mr S. N. Pluzhnik's Witness Statement dated 16th October 2006; and (vii) Professor Jan Ramberg's Legal Opinion dated 16th October 2006.

40. ***Procedural Meetings and Orders:*** The Tribunal held the First Procedural Meeting with the Parties by telephone conference call on 13th June 2006, resulting in the Tribunal's Procedural Order dated 13th and 26th June 2006.

41. The Tribunal held the Second Procedural Meeting with the Parties by telephone conference call on 14th September 2006, resulting (after further written submissions from the Parties) in the Tribunal's Procedural Order dated 17th October 2006.

42. At the request of the Parties, the Tribunal made a Consent Confidentiality Order dated 24th October 2006, countersigned by Palmco and Tenex.

43. By letter dated 25th October 2006, the Tribunal requested KHNP to produce certain documentation for possible use in these arbitration proceedings by one or both Parties.

44. By letter dated 6th November 2006, Palmco requested the cross-examination of all witnesses proffered by Tenex. By letter dated 9th November 2006, Tenex requested the cross-examination of Mr Shin and Mr Lee, the two factual witnesses proffered by Palmco. Tenex did not request the cross-examination of Dr Steyn, the expert witness proffered by Palmco, under a reservation that it was not thereby admitting the accuracy of his written evidence.

45. ***First Main Hearing:*** The First Main Hearing took place in London from 13th November to 16th November 2006, pursuant to the Tribunal's order by email dated 8th November 2006 and (as regards the venue) the Parties' consent. It was recorded by verbatim transcript, subject to certain agreed corrections by the Parties made by letters dated 8th and 13th December 2006.

46. For Palmco, the First Main Hearing was attended by Michael Yoder Esq, Marcus S. Quintanilla Esq and Jillian B. Allen Esq (all of O'Melveny & Myers), Mr J.W. Lee, Ms Injoa Kim (both of Palmco), Mr Y. J. Shin and Dr Julian J. Steyn.

47. For Tenex, the First Main Hearing was attended by Carroll Dorgan Esq, Sigvard Jarvin Esq, Mark A. Crosse Esq (all of Jones Day), Ivan N. Marisin Esq; Julia V. Popelysheva Esq (both of Clifford Chance, Moscow); Timur F. Valiev Esq (of UK PROF, Moscow); Ms Ludmilla M. Zalimskaya, and Mr Aleksey Zabotkin (both of Tenex).

48. The Parties made opening oral submissions at the beginning of the First Main Hearing, Mr Yoder for Palmco [TD1.04[1]], followed by Mr Dorgan for Tenex [TD1.55]. Palmco called as witnesses Mr Shin [TD1.112x, TD1.122xx & 199xx, TD1.182xxx]; and Mr Lee [TD2.3x,TD2.16xx, TD2.141xxx & TD2.185xxx, TD2.173xxT. Tenex called Ms Zalimskaya [TD3.33x, TD3.41xx, TD3.135xxT]; and Mr Pluznik [TD4.6x, TD4.17xx, TD4.75xxx]. The Parties' legal experts on Swedish Law, Professor Nerep and Professor Ramberg, testified together, answering questions from the Tribunal and the Parties [TD3.3-31].

49. ***Post-Hearing Briefs***: After the First Main Hearing, in accordance with the Tribunal's order at the end of that hearing, the Parties exchanged written post-hearing briefs on 18th December 2006 prior to the Second Main Hearing.

50. ***Second Main Hearing:*** The Second Main Hearing took place in Sweden on 23rd December 2006, pursuant to the Tribunal's order by letter dated 21st November 2006 and (as to venue) the Parties' consent. It was not recorded by verbatim transcript; and an audio recording was ordered by the Tribunal to be made and retained by the Parties.

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[1] *Key*: The references to the daily transcript of the First Main Hearing are as follows: "TD1.04" denotes page 4 of Day 1 (13th November 2006); and "x", "xx" and "xxx" denotes a witness's examination-in-chief, cross-examination and re-examination respectively by the Parties and "T" denotes answers to questions from the Tribunal.

51. The Second Main Hearing was attended for Palmco by Michael Yoder, Marcus Quintanilla and Jillian Allen Esqs (all of O'Melveny and Myers), and Mr J.W. Lee of Palmco; and for Tenex, by Carroll Dorgan Esq (of Jones Day), Ivan Marisin & Julia Popelysheva Esqs (both of Clifford Chance), Timur Valiev Esq (of UK PROF) and Mr Aleksey Zabotkin of Tenex.

52. ***Written Costs Submissions***: After the Second Main Hearing, in accordance with the Tribunal's order at the end of that hearing (as later modified), the Parties exchanged written submissions on Legal and Arbitration Costs.

53. ***Closing the Proceedings:*** By letters dated 7th and 21st June 2007 to the Parties, the Tribunal formally closed the file to the Parties and these proceedings as regards matters finally decided in this Award; and the Tribunal there also extended the time for making this Award up to and including the date on which it was made and received by the Parties, in accordance with the Arbitration Agreement and the Parties' agreement described above.

PART C: THE PRINCIPAL CONTRACTUAL TEXTS

(01) The Main Contract dated 28th December 1988 (as originally agreed))

54. The Parties' Main Contract, as originally agreed, was entitled "Contract Numbered 54-02/90I59 for Furnishing Enriched Uranium Hexafluoride". It was made on 28th December 1988 between (i) V/O Technsnabexport of Moscow, then an All-Union foreign trade organisation of the USSR, as "the Supplier" on the one part ("Tenex") and (ii) Palmco Corporation, of Newport Beach, California, USA, as "the Customer" on the other part ("Palmco"). The Main Contract's title stated its purpose: "for delivery of final product to nuclear power stations in the Republic of Korea operated by Korea Electric Power Corporation. (Kepco)" [CX 1].

55. This Main Contract was agreed in the English language, manifestly drafted by persons for whom English was not their first language. The Main Contract was signed by two signatories for the Supplier and one signatory for the Customer. It contained six Appendices A-F; and it was later to be amended in writing by 35 signed addenda dated variously from 28th December 1988 to 18th January 2006. The Main Contract's material terms are set out below, for ease of reference.

(A) Definitions

"(1) Natural Uranium: - non-irradiated uranium with natural assay of isotope uranium-235, i.e. 0,711 weight per cent.

(2) Depleted Uranium - uranium with assay of isotope uranium-235 lower than that in

natural uranium.

(3) Enriched Uranium - Uranium with assay of isotope uranium-235 higher than that in natural uranium

...

(4) Final Product - enriched uranium; produced by the Supplier, in the form of uranium hexaflouride [sic] (UF6) per specification set forth in Appendix A"

(B) Article 1: Subject of Contracts

"The Supplier using the available experience and knowledge undertakes to furnish to the Customer enriched uranium of Soviet origin for the requirements of Kepco's nuclear power stations located in the territory of the Republic of Korea."

(C) Article 2: Term of Agreement

"2.1 This Agreement shall become effective upon execution of this agreement and concurrent execution of a like agreement between Customer and Kepco, shall be for a term of 10 years ..."

(D) Article 3: Annual schedule and quantities of final product

"3.1 The Supplier shall annually deliver to the Customer not less than 30,000-50,000 KgU of final product enriched up to 5 weight percent in uranium-235

from feed uranium of Soviet origin during delivery years 1989 through 1998 inclusive.

3.2 *The delivery requirements of the Customer for delivery schedule of 1989 shall be mutual [sic: mutually] agreed by addendum to this contract, but not later than 1-st March, 1989 [This term produced Addendum No 1 and Addendum No 2 dated February and June 1989 for 40,000 to 80,000 kgU at 3.5 assay in 1989].*

3.3 *The delivery requirements of the Customer for delivery years 1990 through 1998 shall be determined annually by mutual agreement of the parties not later than September of the year preceding each delivery year." [This term produced Addendum No 4 dated 23rd June 1990 for "as close to possible 40,000 Kgu" for 1990].*

(E) Article 4: Delivery terms and prices for final product

"4.1 Final product is to be delivered on terms stipulated in item 5.3 of the present Contract

4.2 *Feed uranium for enrichment is to be supplied by the Supplier, and all costs connected therewith are included in the price stated in item 4.3.*

4.3 *For delivery year 1989, the Customer will pay the Supplier the cost of final product at a price to be agreed upon between the parties payable in US $ per kg U, fob seaport Riga or Leningrad in accordance with INCO TERMS 1980, or FOB Soviet airport; at customer's option (# If customer requires delivery terms CIF Tokyo airport, the parties will determine additional freight costs per mutual agreement and will add this cost to the FOB price). Such price*

agreement shall be made in the addendum to this contract, but not later than the 1-st March, 1989. This price includes the filling and handling charges for "30B" cylinders, as well as transportation of containers with feed uranium, delivery and return of sample containers between enrichment plant and the point of delivery in accordance with item 5.3 of the present Contract.

4.4 The price for final product during delivery years 1990 through 1998 shall be determined by mutual agreement of the parties not later than September of the year preceding each delivery year.

(F) Article 5: Delivery and receipt of uranium

"5.1 Final product is considered to be delivered by the Consignor and received by the Consignee:

- *in respect of quality, according to quality stated by the Producer in the certificates of quality and corresponding to specifications of quality and corresponding to specifications set forth in Appendix E, Document 1.1, to the present Contract;*
- *in respect of quantity, according to number of pieces stated in the bill of lading.*
- *in respect of weight, according to net weight, stated in the Consignor's shipping documents.*

Articles 6 and 8 of the present Contract are applied in case any differences arise. Thereat [sic] terms of item 8.5 of the present contract will always be valid."

...

(G) Article 6: Weighing, Certificates of quality and quantity

"...

6.3 Certificates of quality and quantity in form set forth in Appendix No. G [sic: E] to the present Contract will be enclosed by the Supplier to each container with final product."

(H) Article 7.2: Terms of Payment

7.2 ... If one of the Parties dues [sic: delays] payment for more than the 30 days stated above, it is to pay to the other Party penalty at the rate of 2% above the Prime Rate of the Chase Manhattan Bank, New York, NY, USA calculated at a day to day basis"

(I) Article 9: Law/Force Majeure

"9.1 The present Contract shall be governed in all respects by the material law of Sweden.

9.2 Neither Party shall bear responsibility for the complete or partial non-performance of any of its obligations (except for failure to pay any sum which has become due under the provisions hereof), if the non-performance results from such circumstances as flood, fire, earthquake and other acts of God as well as war, military operations, blockade, acts or actions of state authorities or any other circumstances beyond the Parties' control that have arisen after the conclusion of contract.

9.3 The Party for which the performances of obligation became impossible shall immediately notify in written form the other Party of the beginning, expected time of duration and cessation of above circumstances. Certificate of a Chamber of Commerce (commerce and industry) or other competent authority or organization of the respective country shall be a sufficient proof of commencement and cessation of the above circumstances.

9.4 If the impossibility of complete or partial performances of an obligation lasts for more than 12 months, the party not having declared force majeure shall have the right to cancel the contract totally or partially.

9.5 In cases stated in items 9.2 and 9.4 of the present Contract neither Party has the right to demand compensation of damages or losses (including expenses) from the other Party."

(J) Article 12: Other Conditions

"...

12.2 Neither Party shall be entitled to transfer their rights and obligations under the present Contract to a third Party without a written consent thereto of the other Party ...

12.3 Amendments and additions to the present Contract are valid only if made in written form by the duly authorized representatives of both Parties. ...

....

12..5 After signing of the present Contract all preceding negotiations and

correspondences pertaining to it shall become null and void.

....

12.7 All correspondence under the fulfilment of the Contract is to be effected between the Customer and the Supplier in the English language."

56. As already indicated, the terms of this Main Contract were materially amended over many years. It was, of course, a long term contract, requiring the exercise of good faith and good relations between Tenex and Palmco to ensure its effective performance for their mutual benefit. However, it is plain that certain political and economic changes in the USSR and the Russian Federation (including the latter's diplomatic relations with the Republic of Korea) were to affect both Parties and their Main Contract.

(02) Addendum No 1 to the Main Contact of February 1989

57. This Addendum No 1 [CX 4] was agreed pursuant to Article 3.2 of the Main Contract (cited above):

"Article 1:

1.1 The Supplier will deliver and the Customer will receive until the end of the year 1989, 40,000 to 80,000 kg Uranium in the final product with the enrichment of 3.5% U-235.

1.2 The quantity and deliveries of the final product will be according to delivery schedule to be fixed by mutual agreement not later than April 1, 1989."

Article 3 provided, as did all subsequent addenda in words to the same effect, that all other conditions remained as stated in the Main Contract.

58. Article 1.2 led to the Parties' later agreement on Addendum No 2 in June 1989 whereby the delivery schedule for 1989 was to be agreed not later than 15th July 1989.

(03) Addendum No 3 to the Main Contract of 30th March 1990

59. Before Addendum No 3 in March 1990, the Main Contract imposed an obligation on Tenex to deliver annually to Palmco "not less than 30,000-50,000 KgU" of Final Product with specified assay annually for ten years from 1989 to 1998: see Articles 2.1 and 3.1 above.

60. The use of the phrase "not less than" coupled with a range in Article 3.1 is perhaps an infelicitous expression as a matter of the English language. It is nonetheless clear from the Main Contract as a whole that the Parties thereby intended that Palmco should be granted an option to require deliveries from Tenex of an annual quantity of Final Product ranging from a minimum of 30 tonnes to a maximum of 50 tonnes. It is equally clear that the Parties' obligation to agree a delivery schedule was separate: Articles 3.2 and 3.3 did not impede the exercise of Palmco's option under Article 3.1. Article 3.1 is drafted to impose an obligation on Tenex ("shall annually deliver"); and it is not expressed as requiring the Parties' mutual agreement on quantities to be delivered, in contrast to Article 3.2 as to the delivery schedule and Article 4.4 as to the price of the Final Product.

61. There is so far little difficulty in ascertaining the Parties' contractual intentions as to quantities to be delivered annually by Tenex to Palmco. However, matters begin to change with Addendum No 3 agreed on 30th March 1990, signed by Mr Shin for Palmco and for Tenex by Mr Grigoriev and Mr Shiskin [CX 11].

62. It provided in material part:

"Article 2: Term of Agreement:

This agreement shall remain in effect until December 31, 1999, and shall automatically renew for one additional 10 year period commencing January 1, 2000 unless either party gives notice to the other party in writing prior to July 1, 1999 of its intent not to renew. All terms and conditions of this contract shall remain same during the renewal contract period.

Article 3: Schedule and Quantities of Final Product:

3.1 The Supplier shall deliver to the Customer during October 1990 40,000 kgU of final product enriched to 3.5 weight percent in Uranium-235 from feed uranium of Soviet origin.

3.2 Final product of 40,000 to 100,000 KkgU, annually, enriched to 3.5 weight percent in uranium-235 shall be delivered during calendar years 1991 through 1999 in accordance with the delivery schedule to be agreed upon between Supplier and Customer not later than six months before delivery date.

3.3 Customer has option to purchase the final product of different weight percent in uranium-235 ranging from 3.5 to 4.2. Customer shall advise the Supplier of the weight percent change not later than four months before the Delivery month.

3.4 The schedule and quantities of final product to be delivered during the renewal period commencing January 1, 2000 shall be separately negotiated by the parties."

63. It is significant that the original period of the Main Contract was here extended to 31st December 2009 (the "renewal period"); that the range of quantities is different:

"40,000 to 100,000 KgU"; and that the assays are different.

(04) Addendum No 4 to the Main Contract of 22nd June 1990

64. It remained evident to Tenex, as it was always to Palmco, that the Final Product which was delivered to Palmco under the Main Contract was in turn delivered by Palmco to Kepco under separate contractual arrangements between Palmco and Kepco. It is unnecessary to list the mass of materials to this effect because it is manifest from the terms of the Main Contract as originally agreed (cited above) and from later contractual references in its several addenda, of which Addendum No 4 is one [CX 13].

65. Article 6 of Addendum No 4 added a new Article 6.4 to the Main Contract: *"Supplier shall use its best efforts to arrange for the attendance of Customer and Kepco's representative during sampling and weighting operations"*. The reasons for Kepco's involvement is self-explanatory.

(05) Addendum No 6 to the Contract of 14th August 1992

66. Addendum No 6 to the Main Contract [Exhibit CX 15] was agreed in 1992 during the original period of the Main Contract. By this time, the Respondent had become the legal successor to V/O Techsnabexport; and the Russian Federation had succeeded to the USSR.

67. Addendum No 6 provided by Article 3.2 (with square brackets added here, as below, for ease of later reference):

"3.2 [1] Customer has option to purchase annually from 40000 to 100000 KgU of the final product of different weight percent in uranium-235 ranging from 1.0 to 4.5. Customer shall advise the Supplier of the weight percent change not later than six months before the Delivery Month. The final product shall be delivered during calendar years 1992 and 1999 in accordance with the delivery schedule to be agreed upon between Supplier and Customer not later than six months before delivery date.

[2] The total minimum value of delivered material in delivery years 1992 through 1999 should be not less than the total value of 320000 KgU with the assay of 3.5 percent in accordance with Article 3.2."

4.1 For deliveries during 1992 and 1993 the Customer will pay the Supplier the cost of enriched uranium product determined by Table 1, attached hereto and made a part hereof.

The prices for final product with enrichment not shown in Table No. 1 and within the range from 1.0 to 4.5 weight percent U-235 will be calculated by linear interpolation. The price is understood F.O.B. airport St. Petersburg at Customer's option in accordance with INCO TERMS 1980.

This price includes the filling and handling charges for "30B" cylinders, as well as transportation of containers with feed uranium, delivery and return the sample containers between enrichment plant and the point of delivery in accordance with item 5.3 of the present Contract.

4.2 The prices for delivery years 1994 through 1999 shall be adjusted annually commencing in 1994 from the 1993 base prices stated in Table No. 1, attached hereto, according to the index formula set forth in Article 4.2, Addendum No. 3 dated 30 March 1990."

68. The phrase in Article 3.2 [1] of Addendum No 6 lies at the heart of the Parties' dispute over the Option Issue: "*Customer [Palmco] has option to purchase annually from 40000 to 100000 KgU of the final product of different weight percent in uranium-235 ranging from 1.0 to 4.5* ". As phrased, it is clear that the Parties thereby intended that Palmco should be granted an option to purchase from Tenex from 1992 to 1999 an annual quantity of Final Product ranging from a minimum of 40 tonnes to a maximum of 100 tonnes at assays ranging from 1.0 to 4.5 per cent. As before, it remains equally clear that the Parties' obligation to agree a delivery schedule was separate and did not affect Palmco's exercise of its option regarding the purchase of quantities. It is equally clear that this option applied only to the Main Contract's original period, expiring at the end of 1999. It did not apply, as here phrased, to the renewal period from 2000 to 2009. The Tribunal returns to this important Addendum No 6 below (page 44), which also lies at the heart of the Parties' dispute over the Option Issue.

(06) Addendum No 15 to the Contract of 6th May 1997

69. Addendum No 15 [CX 31] was agreed during the Main Contract's original term but related to the renewal period of ten years, and it was signed by Mr Shin for Palmco and for Tenex by Mr Shiskin and Ms Zalimskaya. Its terms merit citing here almost in full:

"1. [1] Supplier and Customer agree to extend the Contract for a second ten (10) year term under the same terms and conditions of the existing Contract, including the price terms for Final Product, except as provided for herein. [2] The second term shall commence immediately following the end of the first ten (10) year term and continue until December 31, 2009.

2. [1] Customer agrees to increase the total volume of purchases of Final Product to

an amount which shall not be less than the equivalent of 450 tonnes with assay of 3.5 percent during the years 2000 through 2009. [2] Customer will use its best efforts to evenly distribute the volume of Final Product over the Contract term. [3] In addition, Customer agrees to purchase 55 tonnes of EUP with delivery during December of 1997.

3. Customer agrees to implement certain improvements to the Contract commencing on the date of the contract extension, which is January 1, 2000, as follows:

...

(b) Customer agrees to make payment to Supplier within thirty (30) days of the Bill of Lading dates for all deliveries of Final Product.

...

4 . Customer agrees to exert its best efforts to obtain orders for additional quantities of Final Product throughout the remaining term and extension of the Contract.

5. Supplier and Customer agree that Customer may terminate the Contract after December 31, 2004, in the event that KEPCO cancels Customer's EUP supply contract for legal cause or by order of the Korean government. It is further agreed that Customer may cancel all or part of the increased quantity of Final Product, which is that amount of Final Product over the base quantity given in Addendum No. 6, if the Spot Market Price for Enriched Uranium Product computed from prices published by Nukem Reports for Unrestricted Uranium, Conversion, and SWU falls more than ten (10) percent below the contact price below the contract price for Final Product.

6. This Addendum is the entire agreement between Supplier and Customer, and all previous negotiations concerning this subject are superseded.

All other terms and conditions as stated in Contract No. 54-02/90159 shall remain in full force and effect."

70. It is necessary below, in Part F of this Award (page 46), to consider further Addendum No 15: it is the origin of the Parties' dispute over the Option Issue.

(07) Addendum No 21 to the Main Contract of 9th February 2000

71. Addendum No 21 was agreed in 2000, during the renewal period; and it was signed for Palmco by Mr Lee and for Tenex by Mr Grigoriev and Ms Zalimskaya [Exhibit CX 47].

72. It provided, inter alia

"Article 4.5: [1] The Total quantity of Final Product for delivery during the years 2000 throughout 2009 should be 600 metric tonnes, based on 3.5% assay. Customer will use its best efforts to evenly distribute the volume of Final Product ordered over the contract term.

[2] The quantity of Final Product for delivery year 2000 shall not be less than sixty (60) metric tons based on 3.5% assay.

Article 4.6: The prices for delivery years 2001 through 2009 will be determined on the base of Table 1 attached hereto as Exhibit "A" and incorporated herein by reference.

Article 4.7: The annual minimum price increase for delivery year 2001 through 2009 will be the actual inflation rate based on the Implicit Price Deflator for the U.S. Gross National Product for the preceding year, as published by the U.S. Department of

Commerce.

I.. The price for the next particular delivery year after the year of the base price should be determined by the following formula ...

Article 13: The terms of this Contract and data and information coming into possession of either Party by virtue thereof shall be deemed confidential and shall not be disclosed by either Party to any unaffiliated third party without the prior consent of the other Party except as necessary to fulfill each Party's contractual obligations or to comply with applicable laws or government regulations.

All other terms and conditions as stated in Contract 54-02/90159 remain in full force and effect. This Addendum is an integral part of the Contract".

73. It is necessary below, in Part F of this Award (page 55), to consider further the terms of Addendum No 21.

PART D: THE RELEVANT ISSUES

74. As indicated in Part A above (page 7ff), the Parties' disputes fall into three separate parts: the Option Issue, the Late Delivery Issue and the Late Payment Issue. It is appropriate to consider each of these three issues in turn below in Parts F, G, and H of this Award (pages 43, 58 and 63 respectively).

75. However, common to all three issues are the Parties' submissions on the effect of Swedish substantive law, including the CISG, on the meaning and effect of the Main Contract. The Tribunal therefore considers these submissions first in Part E of this Award below (page 37).

76. The Tribunal summarises its conclusions as to these three issues, together with certain other matters, in Part I of this Award (page 67).

77. The Parties' dispute over legal and arbitration is considered below in Part J of this Award (page 69).

PART E: SWEDISH LAW

(01) Introduction

78. The substantive law applicable to the Main Contract is expressly agreed by the Parties to be Swedish law: see Article 9.1 of the Main Contract, cited above (page 25). The Parties' claim and counterclaim are all contractual claims arising from the Main Contract; and both Parties advanced their respective claim and counterclaim under Swedish law. The Tribunal thus seeks to apply Swedish substantive law to the merits of this claim and counterclaim.

(02) Professors Nerep and Jan Ramberg

79. In addition to their own submissions, the Parties presented two Swedish legal experts on the effect of Swedish substantive law on their disputes: Professor Erik Nerep and Professor Jan Ramberg presented by Palmco and Tenex respectively.

80. Professor Nerep and Professor Ramberg presented their opinions in the form of written legal opinions and as oral evidence on Day 3 of the First Main Hearing (15th November 2006). Both experts are well-known scholars and distinguished specialists in their field; each attempted to assist the Tribunal as an independent legal expert; and by the end of their testimony, it was not surprising that there was a very large area of common ground between them. Both are experienced expert witnesses.

81. In these circumstances, it is not necessary to recite the different routes by which Professor Nerep and Professor Ramberg arrived at such common ground. It may here be summarised as follows:

(1) It was agreed (albeit for different reasons, here irrelevant) that the Main Contract was subject to Swedish substantive law incorporating the CISG as to form and interpretation;

(2) It was agreed that the Option Issue under Swedish law turned essentially on the interpretation of the Parties' several contractual arrangements in accordance with Swedish rules on contractual interpretation and the CISG; and

(3) It was agreed that entitlement to compensation under Swedish law in the form of damages payable to a third person was not restricted to those damages already paid but also included damages foreseeable as clearly payable to that third person.

82. As to contractual interpretation, Professor Nerep and Professor Ramberg agreed that the Tribunal's search for the Parties' common intention should begin with the written terms of their Main Contract, as amended. If the Tribunal could not establish such a common intention from those written terms, Professor Nerep and Professor Ramberg disagreed as to legal theory regarding the priority, weight, nuance and scope of evidential materials additional to the Main Contract's written terms, particularly given the legal significance of the "entire agreement" and "merger" clauses in Articles 12.3 and 12.5 of the Main Contract (set out at pages 26-27 above).

83. Professor Nerep proposed that the Tribunal could resort to party-oriented interpretation, using an "inter-subjective standard" complying with Article 8(3) of the CISG ("In determining the intent of a party or the understanding a reasonable person would have had, due consideration is to be given to all relevant circumstances of the case including the negotiations, any practices which the parties have established

between themselves, usages and any subsequent conduct of the parties").

84. As to such additional materials, Professor Ramberg proposed that the Tribunal should "give priority to objective interpretation data which do not relate to the subjective understandings of the parties" [TD3.04]. That data could include "what they said, how they conducted themselves and how they expressed themselves in the contract in writing" [TD3.09]. Professor Ramberg gave priority to objective data because such data "are much more certain than what the parties, when the dispute has arisen, allege, that they had such-and-such intention" [TD3.10]. Professor Ramberg also invoked Article 8(2) of the CISG, as "the reasonable person test", applying generally "the understanding that a reasonable person of the same kind as the other party would have had in the same circumstances" where Article 8(1) of the CISG was inapplicable.

(Article 8 of the CISG provides: "(1) For the purposes of this Convention statements made by and other conduct of a party are to be interpreted according to his intent where the other party knew or could not have been unaware what that intent was. (2) If the preceding paragraph is not applicable, statements made by and other conduct of a party are to be interpreted according to the understanding that a reasonable person of the same kind as the other party would have had in the same circumstances. (3) ...")..

85. Professor Nerep did not here disagree in practice with Professor Ramberg. Although Professor Nerep did not regard any data as absolutely objective, he regarded his "interpretation data" as objective evidence of the Parties' common intention: "Well, you look through correspondence, you look through e-mails, minutes from meetings, drafts et cetera before entering into the contract and evidence of that intent, you can find in the implementation, the actual implementation of the contract," including also oral testimony from witnesses at the hearing [TD3.11].

86. Professor Ramberg emphasised the effect of the merger clauses; but he agreed that, if the Tribunal decided that a material term of the Main Contract was "ambiguous or difficult to understand", then notwithstanding the merger clauses (i.e. Article 12.5 of

the Main Contract and like provisions in succeeding Addenda), the Tribunal could resort to additional evidence "to shed light on what a particular expression in the contract could mean" [TD3.06]. Professor Nerep expressed the firmer view that Article 12.5 would "supersede prior negotiations, memoranda of understanding, letters of intent, et cetera" but that it would not preclude resort to these materials as interpretation data to ascertain the Parties' common intent, under both Swedish rules of interpretation and Article 8(3) of the CISG [TD3.14-15 and Nerep First Legal Opinion # 35].

87. In the Tribunal's view, there was little or no difference in practice between Professor Nerep and Professor Ramberg as regards the application of Swedish law and the CISG to the issues in this case. It is significant that faced with a similar practical question, their answers were materially the same:

(1) By reference to the search for the Parties' common intention in Addendum No 21, Professor Nerep noted that its terms were ambiguous and therefore applied an objective approach [TD3.24] :

".... I would rather put the hypothetical test here, whether, if the parties in this particular moment had thought about the option issue, what would they have decided then, in this specific case ..."

(2) By reference to the "reasonable person" test in Article 8(2) of the CISG (also described by him as the "official bystander" test), Professor Ramberg approached the Option Issue as follows [TD3.26-27, as corrected]:

" ... you would ask the parties here how they should have acted if the question had been put to them: "is there still a 100-tonne option?"; and if they both exclaim "of course", then the test would have been met. And if you find that, of course if they had been asked, they would have said "why not?", of course it is there ..."

The Tribunal has found these hypothetical questions helpful in analysing the relevant materials. Although the answers to these questions provided by Professor Nerep and Professor Ramberg were ultimately different, these answers are a matter for the Tribunal's own determination, as indeed Professors Nerep and Ramberg both recognised.

(03) The Tribunal's General Approach

88. In applying these rules of contractual interpretation, it strikes the Tribunal as important to bear in mind that these are all rules intended to reveal the same principal factor, namely the common intention of the contracting parties. Given that this exercise necessarily takes place in adversarial circumstances after the parties' dispute has arisen, that objective is better served, at least in the present case, by analysing the contemporary rather than the more recent materials. Of the former, the Tribunal gives greater weight in this case to the express terms of the Main Contract and its addenda because they are the Parties' own contemporary wording, known to and shared by both Parties at the most relevant time.

89. The Tribunal is here also concerned that the result of this overall exercise is neither commercially unreasonable nor inconsistent with the reasonable expectations which, in good faith, the Parties would have shared at the time when, together, they negotiated, agreed and signed the contractual wording. That result should not depend on private, unexpressed aspirations or reservations; nor should it be decided by semantic or linguistic technicalities, particularly if expressed by commercial persons whose use of the English language was at times less than perfect.

90. For all these reasons, the Tribunal has here sought to apply the general approach of Professor Nerep and Professor Ramberg in determining the Parries' common contractual intentions; but the Tribunal is inclined to accept the more "objective" approach of Professor Ramberg where it differed (if indeed it differed significantly at all) to the more "subjective" approach proposed by Professor Nerep. The Tribunal addresses more specific aspects of that general approach below.

PART F : THE OPTION ISSUE

(01) Introduction

91. In the Tribunal's view, the principal question in regard to the Option Issue is whether and, if so, to what extent the Main Contract's Addendum No 15 of 6th May 1997 continued Palmco's option into the renewal period from 2000 to 2009, such option having been granted in Article 3.2 of Addendum No 6 of 14th August 1992 in respect of the original contractual period from 1992 to 1999.

92. Tenex denies any such option exercisable by Palmco. It submits that no such option for 2000 to 2009 is expressed in Addendum No 15 of 6th May 1997 or Addendum No 21 of 9th February 2000. Tenex also contends that its case is fully supported by the factual testimony Ms Zalimskaya. (Ms Zalimskaya joined Tenex in 1978; and she is currently Tenex's deputy general director and the head of its directorate for uranium products, responsible for organising the export of uranium products under contracts made by Tenex: TD3.34x; Witness Statement, paragraph 1).

93. Given that Palmco is the Claimant here asserting its claim against Tenex, Palmco bears the legal burden of establishing its case. It is not necessary for Tenex positively to disprove any of Palmco's allegations, although Tenex has also sought to do so.

94. Given its general approach to the application of Swedish substantive law as the law consensually applicable to issues of contractual interpretation, as decided above in Part E of this Award (page 37ff), the Tribunal returns to the material terms of Addendum No 6, Addendum No 15 and Addendum No 21 of the Main Contract.

(02) Addendum No 6

95. The Parties agreed Addendum No 6 on 14th August 1992, as recorded in its recital, "to further amend Articles 3.2 and 4.1 of [the Main Contract] taking into account the amendments already incorporated by Addendum No 3 [of 30th March 1990] in accordance with paragraph 3, Article 12 of the Contract". Article 12(3) contained the requirement for written form: see its terms above (page 26); and its requirements were met with the two signatories for Tenex (Mr Chuvin and Ms Zalimskaya) and one signatory for Palmco (Mr Shin). Its final paragraph stated that all other terms of the Main Contract, as amended hitherto, "remained in full force and effect".

96. Given the effect of Article 12.3 and 12.5 of the Main Contract under Swedish law, the Tribunal here primarily seeks the Parties' contractual intentions from the terms of Addendum No 6.

97. Addendum No 6 contained the new Article 3.2 [1], set out above (page 31). It granted an "option" to Palmco to purchase "annually" from 40000 to 100000 KgU of Final Product limited to the original contract period, then expiring in 1999. That interpretation of Article 3.2 derives manifestly from its context but also from its terms referring (twice) to calendar and delivery years running from "1992" to "1999". That option did not extend beyond 1999.

98. Article 3.2 [2] of Addendum No 6, cited above (page 31), also provided that the total minimum value of delivered material from 1992 to 1999 "should be not less than the total value of 320000 KgU with the assay of 3.5% ...". That minimum total of 320 tonnes for the eight years from 1992 to 1999 corresponds to an average annual minimum of 40 tonnes (320 ÷ 8 = 40). There is, however, an element of uncertainty about this minimum value give the infelicitous use of the conditional verb "should";

but that ambiguity largely disappears when read with the lower range of the option in Article 3.2 [1] providing for a minimum quantity of 40 tonnes at the assay range there specified: the verb "should" must therefore be understood as "shall", notwithstanding potential variations caused by different assays. Like the option in Article 3.2 [1], this minimum total quantity in Article 3.2 [2] did not extend beyond 1999.

99. Accordingly, the Tribunal concludes that Article 3.2 [1] of Addendum No 6 gave to Palmco the right to purchase annually, at its discretion, from 40 tonnes up to 100 tonnes of EUP Final Product at any assay ranging between 1.0 and 4.5 per cent, during the unexpired original period of the Main Contract remaining at that time, i.e to the end of 1999. By Article 3.2 [1] and 3.2 [2], it did not give to Palmco an option to purchase less than 40 tonnes per annum at that range of assay or over the eight years to 1999 less than 320 tonnes with an assay of 3.5%.

100. The Tribunal also concludes that Addendum No 6, being referable to the term of the Main Contract from 1992 to 1999, was and remained subject to Article 3.4 of Addendum No 3 of 30th March 1990 whereby both the schedule and quantities of Final Product to be delivered during the renewal period from 1 January 2000 onwards were "to be separately negotiated" between Tenex and Palmco (cited above, page 29). As already indicated, mutual agreement on delivery schedules by the Parties was and remained a separate obligation to be discharged by the Parties, with no contractual effect on Palmco's unilateral exercise of its option as to quantities purchased.

101. Accordingly, if the contractual chronology stopped here with Addendum No 6 limited to the Main Contract's original period, Palmco's claim on the Option Issue would fail in limine.

(03) Addendum No 15

102. Addendum No 15 of 6th May 1997 resulted from the 'separate negotiations' contemplated by the Parties in Article 3.4 of Addendum No 3 in regard to the Main Contract's renewal period for a second term of ten years, from 1st January 2000 to 31st December 2009. The recital recorded expressly that Addendum No 15 resulted from the "finalized negotiations concerning extension of the existing Contract".

103. As recited above (page 32), Article 1 [1] of Addendum No 15 extended the original period of the Main Contract for a second ten-year period from 2000 to 2009 "under the same terms and conditions of the existing Contract, including the price terms for Final Product, except as provided herein". Under Article 2 [1], the total volume for this renewal period was to be increased to an amount "which shall be not less than the equivalent of 450 tonnes with assay of 3.5 percent" (see pages 32-33 above).

104. This minimum total of 450 tonnes for these ten years corresponds to an average annual minimum of 45 tonnes (450 ÷ 10 = 45). It will be recalled that the total minimum under Article 3.2 [2] of Addendum No 6 was 320 tonnes (40 tonnes annually), hence the agreed "increase" to 450 tonnes (45 tonnes annually) in Article 2 of Addendum No 15 . However, there was no express option in Addendum No 15 equivalent to Article 3.2 [1] of Addendum No 6 (cited at page 31 above); and there was equally no express provision for any 'exception' within Article 1 [1] of Addendum No 15 (page 32). This, as already stated, is the origin of the Parties' dispute over the Option Issue.

105. Ms Zalimskaya was personally involved in the negotiation with Palmco and was one of Tenex's two signatories to Addendum No 15 (with Mr Shiskin). In the Tribunal's view, Ms Zalimskaya was an impressive witness; and she was obviously a highly competent negotiator. The Tribunal has therefore attempted to follow her approach to

these negotiations, albeit not adopting her final conclusion any more than that of Palmco's factual witnesses. Both versions are inevitably self-serving in these adversarial proceedings.

106. Ms Zalimskaya testified at the First Main Hearing: "... it [i.e. Addendum No 15] was a new and agreed upon, in terms of quantities, agreement in agreement with Article 3.4" [TD3.75xx]. Ms Zalimskaya also accepted that the negotiations for this renewal period addressed the terms and conditions upon which the renewed ten-year would take place [TD3.74xx]. She was not the principal negotiator for Tenex in regard to Addendum No 15 ; and it was unfortunate that certain other persons from Tenex were not available to testify as factual witnesses before this Tribunal.

107. It is however plain that Addendum No 15 was not intended as a new free-standing contract; and as a renewal of an existing old contract, it necessarily continued many of the existing terms of the Main Contract (as amended). Indeed, Article 1 of Addendum No 15 provided expressly that "the same terms and conditions of the existing Contract" would apply to the renewal period "except as provided for herein". A significant example of such an old expiring term, implicitly renewed without any express reference, is the Parties' Arbitration Agreement in Article 10 of the Main Contract (cited above, at pages 13-14).

108. The question here is whether, as Palmco contends, Article 3.2 of Addendum No 6 was likewise renewed by Addendum No 15 or whether, as Tenex contends, it was necessarily superseded. It was of course neither expressly renewed nor expressly superseded in Addendum No 15; and the real question is therefore whether it was implicitly renewed, as to which Palmco bears the burden of establishing its case. As already indicated, the Tribunal has sought the answer to this question primarily from the terms of the Parties' contractual wording; and it has not found any material assistance from the Parties' factual testimony or other evidence which was not consistent with the answer resulting from that wording.

109. As a matter of Swedish law, the Tribunal accepts the approach recommended by Professor Nerep to the effect that when parties to an existing main contract agree an addendum on a "very limited subject matter" without "any other intentions at all, then the rest of the contract, the main contract including the following addenda will be unaffected by this addendum and will only of course be effected as to the agreed subject-matter" [TD3.18-19xx]. The Tribunal did not understand Professor Ramberg's opinion to be materially different, albeit emphasising the effect of a main contract's "last addendum" [TD3.19-20]. Unfortunately, this expert opinion does not provide the complete answer because, unlike the Parties' unqualified Arbitration Agreement, the option under Addendum No 6 was expressly limited to annual deliveries during 1992 and 1999; and it did not, by itself, extend to the renewal period from 2000 to 2009.

110. The Tribunal has at times found this part of the case difficult; but it is not ultimately complicated. The Tribunal's decision has been decisively influenced, cumulatively, by the following factors.

111. First, at the time when Addendum No 15 was being negotiated, agreed and signed by the Parties during the unexpired original ten-year term, Palmco already enjoyed its contractual option for 100 tonnes under Addendum No 6. Ms Zalimskaya accepted this context: "Palmco's option did exist [as at 5th May 1997] in the shape it was worded in [Article] 3.2 meaning in the period between 1992 and 1999" [TD3.73xx]. Assessed objectively, if a reasonable person (of the same kind as the Parties) had then been asked to list the old terms and conditions of the Parties's Main Contract as amended, that person undoubtedly would have listed Article 3.2 of Addendum No 6, including the option for 100 tonnes there set out. This factor, by itself, is insignificant; and it does not suffice for Palmco's case: it is necessarily limited to that reasonable person's understanding that the option was agreed for the original period expiring in 1999, without necessarily extending thereafter. It is however the predicate for several other relevant factors.

112. Second, it is necessary to follow the logical progression of the Parties' intentions as expressed in Addendum No 6 applicable to 1992-1999 and Addendum No 15 applicable to 2000-2009. As already noted, Addendum No 15 envisaged a minimum of 450 tonnes over ten years, corresponding to an average minimum of 45 tonnes per annum. Accordingly, it is clear that the option's lower range of 40 tonnes per annum in Addendum No 6 could not readily apply as an annual average to Addendum No 15 (depending on the applicable assays). It could otherwise produce a shortfall over ten years of 50 tonnes. It might therefore be argued that the option's range of 40 to 100 tonnes in Addendum No 6 became irrelevant to Addendum No 15; and hence that the option was therefore, ipso facto, inapplicable to the renewal period.

113. The Tribunal sees the apparent force of this argument; but on further reflection it is a neutral factor for two reasons. First, even if the annual lower range of the option were superseded by the total minimum of 450 tonnes in Article 2 of Addendum No 15, it would still leave intact the upper range of 100 tonnes per annum. The Option Issue addresses only this upper range; and it does not affect Palmco's claim if the lower range of its option were increased from 40 to 45 tonnes per annum. Second, there is a difference between an option for ten annual quantities and a total minimum for the ten-year period as a whole. The latter permits different yearly quantities, whereas the former involves an annual quantity between specific upper and lower limits. In the Tribunal's view, the two serve different purposes; and an agreed minimum total quantity of 450 tonnes over ten years is not inconsistent with an option exercisable by Tenex to purchase up to 100 tonnes for one or more of those ten years.

114. Third, there were old terms in Article 3.2 of Addendum No 6 which were implicitly renewed under Addendum No 15. For example, there was nothing in Addendum No 15 specifying expressly the option available to Palmco to select an assay ranging between 1.1 and 4.5 per cent: Article 2 [1] specified only a tonnage with an assay of 3.5 per cent during the renewal years 2000 to 2009. Yet, as Ms Zalimskaya acknowledged, Palmco was still to enjoy the option to select from that assay range for the renewed 10-year term because Addendum No15 would continue, implicitly, that range option from

Article 3.2 of Addendum No 6. In the Tribunal's view, this is the most significant factor.

115. In her own words (as interpreted into English), Ms Zalimskaya testified :

"In this addendum, this issue is not - was not agreed upon and in principle, as it says here, all the rest which is not covered by this addendum is covered by the terms of the existing contract [The Tribunal understood the witness to be referring here to Article 1 [1] of Addendum No 15]. That is, in a business sense, in business practice, the terms and conditions that had been stipulated in this provision were negotiated the way they were then set forth. What is not to be changed through this amendment was covered proceeding from the agreements that pre-existed" [TD3.76xx].

It will be noted that this assay option, recognised and applied by Tenex during the renewal period by virtue of the general language in Article 1 [1] of Addendum No 15, comes from the same first sentence of Article 3.2 [1] of Addendum No 6 containing the option at issue.

116. In the Tribunal's view, as confirmed by Ms Zalimskaya, the Parties' common intention in regard to the assay option was therefore important. It was particularly important because, as originally intended by the Parties in Addendum No 6, it was only to apply to purchases by Palmco during the Main Contract's original period expiring in 1999. The assay option therefore provides a useful guide, by way of analogy, to the intended application of the option to the renewal period.

117. Fourth, in the Tribunal's view, it is manifest from Addendum No 15 that for the renewal period from 2000 to 2009 Tenex wanted to increase deliveries over and above the new contractual minimum of 450 tonnes contained in Article 2 [1] of Addendum No 15, being equivalent to an average 45 tonnes per annum (an increase from an annual average of 40 tonnes per annum during the expiring original period). The Tribunal notes that this amount of 450 tonnes was expressed as a minimum and not a

maximum, being the natural and (here) correct meaning of "not less than " etc. in Article 2 [1].

118. Article 4 of Addendum No 15 also imposed an obligation on Palmco "to exert its best efforts to obtain orders for additional quantities of Final Product throughout the remaining term and extension of the Contract" (cited above, at page 33). This was a reference to Palmco increasing, if possible, its onward orders from Kepco derived from Tenex's deliveries to Palmco, as known to both Tenex and (necessarily) Palmco also. That obligation inevitably assumed, if successfully implemented by Palmco towards Kepco, that Palmco could have procured deliveries in excess of 450 tonnes from Tenex.

119. Accordingly, the Tribunal agrees with Palmco's submission that Palmco's best efforts obligation in Article 4 is the "common-sense corollary" to the option as to quantities in Article 1, implicitly applying the option's upper limit in Article 3.2 [1] of Addendum No 6 to the renewal period. This interpretation not only springs from the Parties' contractual wording; but it accords with commercial common-sense to be attributed to both Parties at the time. Indeed, a contrary interpretation would be commercially absurd, a result only to be attributed to the Parties if compelled by unambiguous language or conduct to such effect (which is here entirely absent).

120. Moreover, it is significant that this best efforts obligation in Article 4 applied expressly to both the renewal period from 2000 to 2009 and to the original period expiring in 1999 when (as Ms Zalimskaya rightly accepted) the option applied under Article 3.2 [1] of Addendum No 6. If the option's upper limit of 100 tonnes was acceptable to the Parties as a common-sense corollary during the original period from 1992 to 1999, it could be no less so during the renewal period from 2000 to 2009.

121. Fifth, at the time of Addendum No 15, Tenex had access within the Russian Federation to more than sufficient inventories and reserve enrichment capacity to supply Palmco with additional quantities of Final Product, if Palmco were to enjoy and exercise an

option for deliveries up to 100 tonnes per annum during both the original period and the renewal period.

122. Much of Tenex's arrangements with its domestic suppliers (formerly Soviet and now Russian) are inevitably highly confidential; but the available evidence in these arbitration proceedings points in one direction only. Dr Steyn calculated that if Palmco had ordered an additional 40 tonnes of EUP in any year between 1997 and 2001, "that additional demand would only have consumed approximately 249,000 SWUs - ie. approximately 1.2 per cent of Tenex's total enrichment capacity and approximately 18 percent of Tenex's excess capacity": Dr Steyn's First Expert Report, at Paragraph 28 (SWUs , "Separative Work Units", measure the enrichment capacity required to increase the assay of the U-235 isotope in natural uranium).

123. As Dr Steyn recognised in his Second Expert Report, prompted by Ms Zalimskaya's Witness Statement, Tenex was and is not the legal entity which enjoys that capacity. Tenex operates as a foreign trader (formerly as a foreign trade organisation or "commission merchant"); and accordingly that capacity is more accurately attributed to its domestic suppliers. However, these suppliers, like Tenex, were and remain administratively subordinate to the same state agencies as regards procedures required to make EUP available for delivery by Tenex to Palmco.

124. These internal administrative procedures are not public; and there is no evidence that Palmco knew about them in any detail at the relevant time. At the First Main Hearing, Ms Zalimskaya described the annual administrative procedure whereby Minatom and later Rusatom, as the principal state agency, subjects Tenex and its suppliers to planned contractual arrangements: "... Tenex, each time it undertook to supply established quantity of enriched uranium product, had to agree with Minatom the reserves to be created in the production facilities for these quantities, and this reserving was to be made under mid-term and long-term contracts for mid-term and long-term supplies ..." [TD3.40x]. This administrative arrangement, established at state level, "does take into account Tenex's orders which Tenex must honour" [TD3.137-138T].

125. Given the involvement of these state agencies to which both Tenex and its suppliers were and remain administratively subordinate and the absence of any contrary evidence, the Tribunal concludes that there was no material restriction as regards inventories or enrichment capacity which might have constrained Tenex in agreeing to renew the option in Addendum No 15 in respect of the Main Contract's renewal period from 2000 to 2009.

126. Moreover, this option related to quantities which were not highly significant for Tenex, still less its state agencies and domestic suppliers. Whereas Tenex did and does not involve itself with domestic sales of Final Product in the USSR or the Russian Federation, Ms Zalimskaya testified that Tenex's export sales are now about US $2 billion per annum and in 2004 about 10% less [TD3.85-86xx]. In 2000, Ms Zalimskaya testified that the value of sales by Tenex to Palmco was only 2.3% in value of all Tenex's external sales; and in 2004 presumably less given Tenex's greater sales value [Witness Statement, paragraph 8; and TD3.86-87xx]. Accordingly, there was cogent evidence before this Tribunal demonstrating the absence of any material limitation as regards available supplies to Tenex which might likewise have constrained Tenex in agreeing to renew the option in Addendum No 15 in 1997, for the renewal period from 2000 to 2009.

127. Indeed, there was also other evidence that Tenex was able readily to supply additional quantities of Final Product to Palmco and to Palmco's end-user during the renewal period: (i) the Inventory Contract agreed with Palmco in 2001 for the equivalent of an additional 100 tonnes of EUP (at 3.5% per cent assay); and (ii) a contract agreed in 2004 directly with KHNP, the precise terms of which have not been put into evidence in these arbitration proceedings.

128. In conclusion, whilst none taken individually are necessarily decisive, these several factors taken together more than suffice for the Tribunal to determine the Parties' common intentions expressed in Addendum No 15 in regard to the renewal period from 2000 to 2009. By May 1997, the Parties had agreed increased minimum annual quantities from 30 tonnes to 45 tonnes; Tenex was in a good position to deliver more than these minimum quantities; Tenex had also expressed a strong interest to do so; and, subject to Kepco's future orders from Palmco, Palmco had a strong commercial incentive in purchasing greater quantities from Tenex for the renewal period, just as it had for the original period from 1992 to 1999. In such circumstances, an option exercisable by Palmco for additional quantities during the renewal period made commercial common-sense for both Tenex and Palmco, particularly in the form of an existing contractual option already agreed for the original period from 1992 to 1999. It also makes good sense of the Parties' own contractual wording up to May 1997, particularly Article 4 of Addendum No 15 in regard to Palmco's "best efforts" obligation to obtain additional orders from Kepco (the fourth factor considered above, at page 50) and the implicit continuation of Article 3.2 of Addendum No 6 in regard to Palmco's assay option from the original period into the renewal period (the third factor considered above, at page 49). Moreover, this common-sense approach, firmly based on the Parties' own agreed contractual wording at the time, is entirely consistent with the relevant documentary evidence and testimony, particularly the oral testimony of Ms Zalimskaya. As already noted above, Ms Zalimskaya was an impressive witness; she strongly defended Tenex's interests; and her testimony was therefore all the more effective in confirming the Tribunal's approach in identifying the Parties' common intentions at the relevant time.

129. The Tribunal therefore takes up the hypothetical question posed by Professor Ramberg to the Parties' negotiators on 6th May 1997, as the day when Addendum No 15 was agreed and signed: "Is there still a 100-tonne option?". At that time, assessed by any objective, reasonable standard in regard to the renewal period from 2000 to 2009, the Tribunal concludes that both Parties would have said, unambiguously: "Of course".

(04) Addendum No 21

130. The Parties agreed Addendum No 21 on 9th February 2000, at the inception of the renewal period from 2000 to 2009. Tenex submits that Article 4.5 of Addendum No 21 imposes a specific total quantity of Final Product during this renewal period of 600 tonnes, based on 3.5% assay, which is inconsistent with any option previously granted to Palmco to increase this quantity to 100 tonnes per annum. Palmco submits that this figure of 600 tonnes was a floor, not a ceiling.

131. Tenex's case is largely based on the language of Article 4.5 [1] and 4.5 [2] of Addendum No 21, set out above (page 34). In the Tribunal's view, however, that case fails for three principal reasons.

132. First, it is evident that the main issue in the Parties' negotiations for Addendum No 21 was to increase the minimum quantity of 450 tonnes in Addendum No 15 to 600 tonnes requested by Tenex, in return for a price reduction requested by Palmco. Ms Zalimskaya testified, as one of Tenex's two signatories to Addendum No 21 (with Mr Grigoriev) : "Tenex's intention was to increase the fixed volume from 450 [in Addendum No 15] to 600 tonnes [in Addendum No 21] with accompanying reconsideration of prices" [TD3.131xx]. These indications, confirmed by contemporary correspondence from Tenex to Palmco, suggest that the figure of 600 tonnes was a new and increased minimum quantity, leaving the option untouched.

133. Second, the drafting of Addendum No 21 evidences an imperfect mastery of the English language. There is (again) the ambiguous use of the verb "should" in the first sentence of Article 4.5 [1]: does it mean "shall", thereby suggesting a total quantity of 60 tonnes supportive of Tenex's case; or is it there indicating only a minimum

quantity, thereby suggesting that a greater quantity is possible above 600 tonnes and therefore supportive of Palmco's case? In Article 4.5 [2], the use of the phrase "not less than" 60 tonnes for delivery in 2000 implies that more than 60 tonnes is possible, which would be more consistent with the case advanced by Palmco than the case advanced by Tenex. Tenex's reliance on the even-distribution provision in Article 4.5 [1] of Addendum No 21 is negated by the presence of the same provision in Article 2 [2] of Addendum No 15. In all the circumstances, it is difficult for the Tribunal to place any decisive reliance on any of these semantic points rased by Tenex.

134. Third, the Tribunal has seen no cogent evidence that the economic and commercial positions of Tenex and Palmco had materially changed in February 2000 from their earlier respective positions in May 1997 when Addendum No 15 was agreed. In particular, Tenex was still not constrained from responding favourably, with its state agencies and domestic suppliers, to Palmco's exercise of the option's upper range; and there was no commercial reason for Palmco to abandon its existing option.

135. In conclusion, therefore, the Tribunal determines that Addendum No 21 cannot affect the position already agreed between the Parties. If there had been no option agreed earlier for the renewal period, Addendum No 21 certainly did not create such an option. Conversely, Addendum No 21 did not establish the Parties' common intention to extinguish the option already granted, as the Tribunal has decided above, in Addendum No 6 and renewed by Addendum No 15.

136. Accordingly, the Tribunal takes up again Professor Ramberg's hypothetical question on 9th February 2000, as the date when Addendum No 21 was signed: " "Is there still a 100-tonne option?". At that time, assessed by any objective, reasonable standard, the Tribunal concludes that both sides would have said: "Of course - why not?". Unfortunately, subsequent events have led one side to express a different answer later; but that change does not invalidate the hypothetical answer at the relevant time, made by a reasonable person of the same kind as both Palmco and Tenex.

(05) The Tribunal's Decision

137. Accordingly, as regards the Option Issue, the Tribunal decides that Palmco has the option to purchase annually from Tenex up to one hundred tonnes of EUP of 1.0 per cent to 4.5-per cent assay pursuant to the Main Contract, as amended (inter alia) by Addendum No 15 applying to the renewal period from 2000 to 2009 the option contained in Article 3.2 [1] of Addendum No 6. As regards delivery schedules for quantities triggered by the exercise of that option, the Parties remain under a separate contractual obligation to agree such schedules, timeously and in good faith, also in accordance with Article 3.2 [1] of Addendum No 6.

138. As regards the price for such quantities from 2001 to 2009, the issue between the Parties is whether the provisions of Addendum No 15 as amended by Article 4.6 of Addendum No 21 will apply (as Palmco contends) or "current market prices" (as Tenex subsidiarily submits). For reasons set out below in Part I (page 67), the Tribunal does not decide this issue in this Award. For reasons which are also set out below in Part I of this Award, the Tribunal does not here decide upon the further and consequential relief claimed by Palmco in respect of the Option Issue.

139. In arriving at these conclusions on the Option Issue, the Tribunal did not rely on Palmco's separate contractual relationships with Kepco and KHNP; nor Palmco's submissions on Article 8(1) of the CISG ; nor Palmco's several invitations to draw adverse inferences against Tenex. If the Tribunal had taken any of these matters into account, the same could only have confirmed the conclusions already reached independently for the reasons set out above or alternatively were not of such relevance or weight as to modify or displace any of those conclusions. Accordingly, it would serve no present purpose to adjudicate formally on these other parts of Palmco's submissions or Tenex's submissions in response.

PART G: THE LATE DELIVERY ISSUE

(01) Introduction

140. As already indicated above in Part A of this Award (page 8ff), Palmco claims compensation for Tenex's contractual breach in delaying agreement upon the delivery schedule for 2005 and in delaying such delivery. Such compensation is claimed in the sum of US $1,485,955.03 representing the amount which Palmco will be required to pay to KHNP as penalties under their contract for the late deliveries of Final Product scheduled for March and June 2005. Alternatively, Palmco claims compensation in the form liquidated damages under the Main Contract in the lesser sum of US $1,322,754.57, pursuant to Article 13.1 of the Main Contract, as amended by Addendum No 3.

141. Palmco's substantive complaint is Tenex's alleged failure to agree a delivery schedule earlier than April 2005, in breach of Article 3.2 of the Main Contract, applied with the requirement for good faith (Article 7 of the CISG) and the Parties' previous practice (Article 9(1) of the CISG) in agreeing the relevant delivery schedule not less than six months before the first delivery date requested by Tenex, itself based on a corresponding request from KHNP (as Tenex knew).

142. Tenex denies any breach, causation or liability for liquidated damages or actual damages. It also submits (inter alia) that liquidated damages under Article 13.1 of Addendum No 3 to the Main Contract are limited to late delivery of Final Product: it does not apply to late agreement to a delivery schedule, even if such conduct amounted to a breach of the Main Contract. As for actual damages, Tenex submits that KHNP's

unpaid invoice to Tenex in the sum of US $1,357,424.21 (together with an intimation, according to Mr Lee, that KHNP will claim a further US $128,530.82) is insufficient proof of any damage suffered by Palmco.

(2) The Relevant Factors

143. The Parties agreed Addendum No 33 dated 22nd April 2005 [CX 99], without any reservation by Palmco. Article 1 set out, as an amendment to Article 3.2 of the Main Contract, the Parties' agreement on the deliveries of Final Product to be made from July to October 2005. Tenex duly made deliveries to Palmco in accordance with this agreed schedule; and the Tribunal finds there was no breach of this schedule by Tenex. That determination suffices to dismiss any claim by Palmco in the form of liquidated damages under Article 13.1 of the Main Contract, its terms being limited to late delivery: "Should Supplier be unable to deliver final product ... on the scheduled Delivery date" etc [CX 11].

144. As regards the alternative formulation of Palmco's claim, Palmco delivered to Tenex a preliminary schedule by letter dated 1st July 2004, proposing deliveries from Tenex to Palmco running from March to June 2005, i.e. eight months before the first requested delivery date. Palmco pressed for a response to its letter by fax dated 29th September 2004. Tenex intimated its unwillingness to agree that schedule only by letter dated 13th October 2004, i.e. less than five months before the first requested delivery date . This letter's recipient, Mr Lee of Palmco, understood at the time that Tenex "are not saying no, they are not saying yes" [TD2.134xx]. Yet, although no schedule was yet agreed between Tenex and Palmco under their Main Contract, Palmco proceeded to confirm its own delivery schedule to KHNP, by letter dated 1st November 2004.

145. There is no doubt that by October 2004, the hitherto good commercial relations between Palmco and Tenex had begun to break down. It was also plain from their

evidence that Mr Lee was not on good terms with Mr Pluznik who had joined Tenex in July 2003 (as the director of its uranium product directorate responsible for Asia and Africa). Mr Pluznik testified that he was fully aware from July 2004 onwards that Palmco's preliminary schedule derived originally from KHNP and that Palmco needed to agree a schedule with Tenex at least six months before the first delivery because of the necessary "delivery preparation" [TD4.74xx], in accordance with the Parties' established procedures.

146. Mr Lee had several reasons to feel disappointed with Tenex, particularly over the latter's attempts to deal directly with KHNP. Mr Lee justified his decision to confirm a delivery schedule with KHNP, knowing that none had been agreed with Tenex, as follows: " ... we had to confirm this schedule because - let us look at the time period at that time. It was the CQQ issue [This is a reference to the Late Payment Issue, considered separately in Part H at page 63 below, concerning certificates of quality and quantity required of Tenex by Palmco in April-June 2004]. We had the CQQ issues and we were worried. Tenex is trying to go directly behind us to circumvent us and get into a new direct contract. I mean, what could we say? They tried to damage our relationship with our customer [KHNP] and now we are saying to our customer, hey, I am sorry, we could not confirm your schedule and they are worried we are not going to be able to deliver 2005 quantities. Personally as the president of Palmco, I had no choice to say okay, we will do it." [TD2.134xx].

147. Having considered Mr Pluznik's testimony as a whole, the Tribunal is left in material doubt that Tenex's delayed response to Palmco's attempts to agree the 2005 delivery schedule was malicious, as submitted by Palmco, with the clear intent to disturb Palmco's good relations with KHNP. Mr Pluznik testified that the delay was in fact caused by Palmco's increased order (about 68 tonnes in 2004 to 86 tonnes in 2005, or 26% more); and that Tenex could not agree a delivery schedule for such quantities until the administrative arrangements had been confirmed by Rusatom in "November-December 2004" [Witness Statement, paragraph 11 and TD4.65-66xx]. Given that Palmco bears the burden of establishing its claim to the Tribunal's satisfaction, the

Tribunal accepts this explanation, thereby rejecting Palmco's submission that Tenex's conduct was malicious or "wilful".

148. It was nonetheless unfortunate that Tenex did not advise Palmco of its internal predicament at any time between July and October 2004. Tenex could and should have done so timeously, in compliance with its obligations under the Main Contract. If Tenex had done so, Palmco's embarassment with KHNP might well have been avoided. A more open approach would probably not have led Palmco to agree KHNP's delivery schedule, without a corresponding schedule from Tenex. Moreover, the Parties could well have agreed a timely schedule for delivery of a lesser amount in March 2005 and awaited until "November/December" 2004 the result of Rusatom's administrative procedures for the balance. At a minimum, based on the previous year's deliveries from Tenex to Palmco, Rosatom would have been anticipating at least 60 tonnes for delivery in 2005, a quantity more than sufficient for the first several months' deliveries by Tenex to Palmco and, in turn, by Palmco to KHNP. No adequate explanation was offered by Tenex in these arbitration proceedings as to why this could not have been done and made known to Palmco at an appropriate time.

(3) The Tribunal's Decision

149. Accordingly, for these reasons, the Tribunal determines as regards liability that Tenex breached its contractual obligation towards Palmco under Article 3.2 of the Main Contract (interpreted and applied with Articles 7 and 9(1) of the CISG) in failing to attempt to agree with Palmco any delivery schedule for 2005 before September 2004.

150. As regards causation, the Tribunal determines that Palmco's legal liability to pay compensation to KHNP was substantially caused by Tenex's breach of contract.

151. As regards quantum, the Tribunal applies the approach under Swedish law described by Professor Nerep and Professor Ramberg in regard to compensation foreseeably payable to a third person, as summarised above in Paragraph 81(3) of this Award (page 38). The Tribunal also determines that Palmco has suffered a loss in the sum of US $1,485,955.03, as actual damages which sum is foreseeable as clearly payable by Palmco to KHNP, comprising the invoiced sum of US $1,357,424.21 and the further uninvoiced sum of US $128,530.82. That loss assumes a legal liability by Palmco to KHNP for this amount, as found by the Tribunal on the evidence adduced in these arbitration proceedings; and it also assumes, as Palmco formally represented to the Tribunal, that Palmco shall discharge its liability to KHNP in full when this amount is recovered by Palmco from Tenex. In the circumstances, the Tribunal does not award interest on Palmco's claim.

PART H: THE LATE PAYMENT ISSUE

(01) Introduction

152. As indicated above in Part A of this Award (page 9), Tenex counterclaims against Palmco compensation in the sum of US $128,549.82 for Palmco's contractual breach in withholding timely payment for the delivery in March 2004, in breach of Article 7.2 of Main Contract, as amended by Addendum No 13 and Addendum No 15.

153. Palmco denies any breach and all liability to Tenex on its counterclaim. Its defence rests on its complaint regarding "incorrect" technical documentation (CCQs) provided by Tenex; and it contends that Tenex's misconduct constituted either an unsatisfied condition precedent to payment under the Main Contract or a fundamental breach within the meaning of Article 25 of the CISG justifying non-payment. (Article 25 provides: "A breach of contract committed by one of the parties is fundamental if it results in such detriment to the other party as substantially to deprive him of what he is entitled to expect under the contract, unless the party in breach did not foresee and a reasonable person of the same kind in the same circumstances would not have foreseen such a result").

(2) The Relevant Factors

154. This dispute relates to the delivery shipped on 31st March 2004, whereby Tenex supplied to Palmco quantities of Final Product physically complying with the Main

Contract, including the ASTM specifications required by Palmco.

155. Palmco should have paid Palmco for this delivery within thirty days thereafter under Article 7.2 of the Main Contract, as amended by Addendum No 13 and Article 3(b) of Addendum No 15, i.e. the sum of US $23,742,269.58 no later 30th April 2004.

156. Palmco did not pay this sum until 1st June 2004, 32 days after the latest date for timely payment under the Main Contract. Palmco, as indicated, defends its late payment by reference to a dispute over the technical documentation associated with this March delivery.

157. These technical documents were the certificates of quality and quantity (CQQs), to be supplied by Tenex to Palmco under Article 5.1 of the Main Contract. Tenex first provided CQQs for this March delivery prior to shipment, with a second set supplied on 23rd April 2004.

158. From this point onwards, within the time allowed for payment by Palmco, the only controversy remaining between the Parties as to the content of the CQQs related to the scaling factor of 0.67614 used by Tenex, instead of 0.67612 as Palmco demanded. The scaling factor was irrelevant to the quality of the EUP comprising the March delivery. A scaling factor is used to calculate the amount of uranium contained in the EUP: the higher the scaling ratio, the less uranium in the EUP. The difference between the scaling factors therefore signified a difference of only 0.9 KgU, corresponding tin value to about US $700, both being commercially de minimis in the circumstances.

159. Having taken delivery from Tenex and sold on to KHNP, Palmco withheld payment to Tenex for this March delivery in order to induce Tenex to produce a third set of CQQs with its desired scaling factor of 0.67612. As Mr Lee testified: " ... we did not say we would not pay. In this particular one, we said the payment would be delayed if the documents were not received in time" [TD2.113xx]. In contrast, KHNP had paid Palmco for this March delivery by 29th April 2004, albeit against a "guarantee" from

Palmco that the "correct CQQs" would be provided later, according to Mr Lee [TD2.117-118xx].

160. By this time, as already explained earlier in this Award, the commercial relations between Palmco and Tenex had begun to deteriorate, including the relations between Mr Lee and Mr Pluzhnik. It is plain that Palmco decided deliberately to withhold payment in the full amount until Tenex supplied the "correct" CQQs. What might have seemed to Mr Lee an important matter of principle for Palmco, with only minor consequences for Tenex save for non-receipt of the payment due, had in fact potentially grave consequences for Tenex. Under Russian law, Tenex could have incurred substantial fines levied by the Russian Governmental authorities up to 100% of the value of the unpaid March delivery, i.e. US $23,700,000: Article 15.25(2) of the Administrative Offences Code, as then in force, provided for the imposition of administrative fines of 10% to 100% of the relevant non-repatriated currency proceeds.

161. At some point in May 2004, Mr Lee learnt of these potential consequences for Tenex. Regrettably, it did not cause Palmco to relent until 1st June 2004, after the Parties had agreed Addendum No 30 dated 28th May 2004 resolving for the future their dispute over the scaling factor in the CQQs.

(3) The Tribunal's Decision

162. In the Tribunal's view, Palmco provided no contractual justification for its late payment, even assuming that Tenex were wrong in not supplying the "correct" CQQs with the scaling factor required by Palmco. In all the circumstances, this scaling factor was not, as Palmco submits, "a precondition to payment under the Main Contract"; nor was it a fundamental breach under the CISG, justifying Palmco's non-payment. The Tribunal determines that Palmco's deliberate withholding of payment was therefore legally unjustified; and that Palmco was accordingly in breach of its obligation to make

timely payment under Article 7.2 of the Main Contract, as amended by Addendum No 13 and Addendum No 15.

163. As to the quantum of compensation, the Tribunal determines the amount by reference to Article 7.2 resulting in liquidated damages in the amount of US $124,549.82, as stated in Tenex's unpaid invoice to Palmco dated 16th July 2004. To that principal sum, the Tribunal also awards interest under Section 4 of the Swedish Interest Act at the requisite rate of 10.5% simple interest per annum from 16th August 2004 until payment.

PART I: SUMMARY OF THE TRIBUNAL'S CONCLUSIONS

164. It is convenient here to summarise the effect of the Tribunal's several decisions so far in this Award.

165. As regards the Late Delivery Issue, the Tribunal has found in favour of Palmco and adjudged Tenex liable to Palmco in damages in the principal sum of US $1,485,955.03, with no order for interest: see Part G of this Award (page 61ff).

166. As regards the Late Payment Issue, the Tribunal has found in favour of Tenex and adjudged Palmco liable to Tenex in the principal sum of US $124,549.82 as liquidated damages, together with simple interest thereon at the rate of 10.5% per annum from 16th August 2004 until payment: see Part H of this Award (page 65ff).

167. As regards the Option Issue, the Tribunal has decided and declared the primary point of contractual interpretation in favour of Palmco: see Part F of this Award (page 57). The Tribunal has not here decided the consequential relief claimed by Palmco; nor the issue as to price.

168. As to the price(s) of Final Product to be delivered by Tenex under Palmco's exercise of its annual option, the Tribunal notes that Tenex raised this issue as a subsidiary part of its case, relatively late in these arbitration proceedings: see Paragraph 10 of this Award (page 8). The Tribunal considers that it has not received from the Parties sufficient submissions on this issue; and the Tribunal is therefore reluctant to decide such a potentially important part of the Parties' dispute without such submissions.

Accordingly, the Tribunal defers its decision as to the price issue raised by Tenex to a later award, so as to permit the Parties to make further submissions to the Tribunal.

169. As the consequential relief claimed by Palmco, set out in Paragraph 9 (ii) and (iii) above (page 8), the Tribunal does not consider that it is in a position to decide this part of the Parties' dispute on the materials currently available. The Tribunal requires a better understanding of the current implications for both Parties as regards disputed deliveries of Final Product from 2006 onwards, i.e. not only as regards 2006 and 2007, where only interim arrangements have been made (as set out above, at pages 10 to 12), but also the further years 2008 and 2009 remaining in the Main Contract's renewal period. Accordingly, the Tribunal likewise defers its decision as to this claimed consequential relief to a later award, so as to permit the Parties to make further submissions to the Tribunal.

170. For these reasons, this Award is not a "Final Award" but a "First Partial Final Award", not thereby making this Tribunal functus officio in regard to those undecided parts of Palmco's claim for consequential relief in regard to the Option Issue and the issue as to price raised by Tenex (including any related legal and arbitration costs). By separate procedural order, the Tribunal will indicate to the Parties how these matters could be addressed further, in consultation with the Parties' legal representatives, preferably in a timely manner and, possibly, without the need for a further oral hearing.

PART J: LEGAL AND ARBITRATION COSTS

(01) Introduction

171. As indicated above in the Introduction, Part A of this Award (page 20), the Parties submitted several written submissions on legal and arbitration costs following the Second Main Hearing, principally by letters dated 26th January 2007 for Palmco and Tenex respectively. Subsequently, Tenex commented on Palmco's costs submissions by letter dated 7th February 2007, to which Palmco replied by letter dated 14th February 2007, to which Tenex in turn responded in by letter dated 19th February 2007.

172. ***Palmco***: Palmco claims a total of US $2,099,010.86 comprising (i) legal fees paid to its legal representatives and three other law firms in Sweden, Russia and Korea in the total sum of US $1,417,914.55, (ii) US$ 27,593.92 as expenses incurred for Palmco's factual witnesses; (iii) US $201,520.16 incurred as fees and expenses of Palmco's expert witnesses; (iv) US $ 4,691.17 as expenses incurred for Palmco's representative at the First Main Hearing; (v) US $122,915,28 as other costs and expenses; and (vi) US $324,375.78 as Assumed Tribunal fees and expenses (corresponding to EUR 250,000 paid by Palmco as deposits held the LCIA as deposit-holder for the Tribunal).

173. Tenex submits, by letters dated 7th and 19th February 2007, that Palmco's claim for legal costs is manifestly excessive and unreasonable. In particular, Tenex submits that Palmco has not justified its claims for legal advice in the amounts of US $161,605 as to Swedish law, US $56,055 as to Russian law and US $6,156 as to Korean law. Tenex also challenges the fees and costs of Dr Steyn's attendance at the First Main Hearing, claimed by Palmco in the sum of US $28,015; and the costs of Ms Injoa Kim's

attendance at this hearing in the sum of US $4,691.17.

174. There appears to have been a temporary misunderstanding regarding the interim payment of half of the fees for the Russian-English interpreter in the sum of US $3,241.41. That sum was not paid timeously by Palmco to Tenex (on an interim basis); but the Tribunal understands that it was paid by Palmco to Tenex on 14th February 2007. Accordingly, as regards the principal amount, this interim payment now entitles Palmco to maintain its claim; and (as Tenex indicates), it also reduces Tenex's claim for the costs of this interpreter by US $3,241 or Euros 2,432.

175. ***Tenex***: By Tenex's post-hearing costs submissions of 26th January 2007, Tenex claims against Palmco a total amount of EUR 1,214,759.78, comprising (i) legal fees and expenses (including expert witness & hearing expenses): EUR 944,519.43; (ii) the costs incurred for Tenex's witnesses and representatives: EUR 20,240.35; and (iii) Assumed Tribunal fees and expenses: EUR 250,000 (paid by Palmco as deposits to the LCIA acting as the Tribunal's deposit-holder).

(02) The Tribunal's Decision

176. It is appropriate to deal separately with Legal Costs and Arbitration Costs.

177. ***Legal Costs:*** Under Swedish law, as the lex loci arbitri, the Tribunal may order costs comprising the reasonable costs which a party reasonably incurs in the arbitration proceedings (including fees for legal representation and advice).

178. Having regard to the result of these arbitration proceedings so far, it is clear that Palmco has substantially succeeded, having prevailed on the Option Issue and the Late Delivery Issue. Conversely, Tenex prevailed on the Late Payment Issue. Taking all circumstances into account, including particularly the significance of each issue in

money terms and time spent, the Tribunal determines that Tenex should not recover any of its legal costs from Palmco and that Palmco should recover 85% of its legal costs from Tenex as quantified by the Tribunal.

179. As to the reasonableness of the quantum of legal costs claimed by Palmco, the Tribunal does not accept the criticisms made by Tenex. This was, on any view, a difficult, time-consuming and important case; it raised many potential legal issues not limited to Swedish law; this arbitration took place under great time pressures for the Parties and the Parties' factual witnesses, experts and legal representatives; and it is always easy to criticise expenditure after the event. The test of reasonableness in adversarial proceedings must, however, be applied at the time, without the advantage of hindsight. Accordingly, having considered the respective written submissions of the Parties, the Tribunal finds Palmco's legal costs to have been reasonably incurred in a reasonable amount; and indeed if relevant, the Tribunal would make the same finding in regard to Tenex's own legal costs.

180. For these reasons, the Tribunal decides that Tenex shall pay to Palmco its legal costs in the sum of US $1,508,439.00 , being 85% of its own legal costs claimed in the sum of US $ 1,774,635.08 (ie. US $2,099,010.86 less US $324,375.78 as "Arbitrators' Fees and Expenses") within thirty days of the date of this Award.

181. ***Arbitration Costs***: As regards the fees and expenses of the Tribunal, i.e. the Arbitration Costs, there is a separate discretion to be exercised by the Tribunal under the Arbitration Agreement and Section 37 of the 1999 Act. The latter provides (inter alia), as translated into English, that an arbitration tribunal may order by an award the parties "to pay compensation to them following the date of the rendering of the arbitral award. The compensation shall be stated separately for each arbitrator").

182. These arbitration costs, calculated in accordance with the Parties' Arbitration Agreement, the Tribunal's Terms of Appointment and the 1999 Act are as follows:

(1) Dr Robert Briner:

Fees:	*Euros*	*95,000*	*(190 hours)*
Expenses:	*Euros*	*7,366.90*	

(2) Jan Paulsson Esq

Fees:	*Euros*	*98,000*	*(196 hours)*
Expenses:	*Euros*	*5,777.07*	

(3) V.V.Veeder Esq

Fees:	*Euros*	*135,000*	*(270 hours)*
Expenses:	*Euros*	*2,905.97*	

Accordingly, the total sum for Arbitration Costs amounts to Euros 344,049.94.

183. Having regard to all the circumstances of this case, including the fact that the Tribunal has already reduced Palmco's claim for legal costs, the Tribunal determines that Tenex shall bear 85% of the Arbitration Costs, i.e. that Tenex shall bear in full its 50% share of those costs and pay to Palmco within thirty days of the date of this Award the sum of Euros 212,500 incurred by Palmco as the relevant part of its deposits paid to the LCIA in the total sum of EUR 250,000. Subject to such payment to Palmco and the future conduct of these proceedings, the Tribunal may direct the LCIA to return to Tenex any balance left over in the deposits held by the LCIA (with credited bank interest accrued payable by the LCIA pro rata to Palmco and Tenex).

PART I: THE OPERATIVE PART

184. **For the reasons set out earlier in this Award, the Tribunal finally awards as follows:**

(01) The Claimant has the option to purchase annually from the Respondent up to one hundred (metric) tonnes of EUP of 1.0 per cent to 4.5-per cent assay pursuant to their Main Contract dated 28th December 1988, as amended (inter alia) by Addendum No 15 applying to the renewal period from 2000 to 2009 the option's upper limit contained in Article 3.2 of Addendum No 6;

(02) The Respondent is liable to the Claimant in the principal sum of US $1,485,955.03 (United States Dollars One Million, Four Hundred and Eighty-Five Thousand, Nine Hundred and Fifty-Five, and three cents) as damages for breach of the Main Contract dated 28th December 1988 (as amended) in failing to attempt to agree any delivery schedule for 2005 before September 2004; and the Respondent is hereby ordered to pay the said principal sum to the Claimant within thirty days of the date of this Award;

(03) The Claimant is liable to the Respondent in the principal sum of US $124,549.82 (United States Dollars One Hundred and Twenty-Four Thousand, Five Hundred and Forty-Nine, and 82 cents) as liquidated damages for breach of the Main Contract dated 28th December 1988 (as amended) in failing to make payment timeously of the price due no later than 30th April 2004; and the Claimant is hereby ordered to pay the said principal sum to the Respondent within thirty days of the date of this Award, together with simple interest thereon at the rate of 10.5% per annum from 16th August 2004 until payment;

(04) The Respondent is hereby ordered to pay to the Claimant within thirty days of the date of this Award the sum of US $1,508,439.00 (United States Dollars One Million, Five Hundred and Eight Thousand, Four Hundred and Thirty-Nine) incurred by the Claimant as part of its legal costs to the date of this Award;

(05) The Respondent is hereby ordered to pay to the Claimant within thirty days of the date of this Award the sum of Euros 212,500.00 (Euros Two Hundred and Twelve Thousand, Five Hundred) incurred by the Claimant as part of the arbitration costs to the date of this Award;

(06) The Respondent is ordered to bear its own legal costs in full, together with its own share of the arbitration costs to the date of this Award;

(07) The Tribunal hereby retains jurisdiction to decide in a further award those parts of the Claimant's consequential relief here left undecided as regards its exercise of the option, the subject-matter of the first sub-paragraph above; and

(08) All other claims and counterclaims by the Parties are otherwise dismissed.

Stockholm, as the "Seat", or Legal Place, of the Arbitration;

22 June 2007;

Robert Briner *V.V.Veeder* *Jan Paulsson*