

GENERAL INSTRUCTION MANUAL

ISSUING ORG. ACCOUNTING POLICIES & SYSTEMS DEPARTMENT

ISSUE DATE
10-01-2010REPLACES
NEWSUBJECT **TIHAMA POWER INVOICE VERIFICATION AND MONTHLY
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CONTENTS This instruction describes the procedures for reviewing Tihama Power Cogeneration invoices and monthly accrual requirements. This instruction includes:

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Supplement 287.002-1: **TIHAMA POWER PRIOR PERIOD ADJUSTMENTS, LATE PAYMENT FEES AND
DISPUTED PAYMENTS**

1. GLOSSARY

1.1. Abbreviations & Acronyms:

AI	Accounting Instruction
BOOT	Build, Own, Operate & Transfer
CCR	Charge Calculation Reports
COD	Commercial Operation Date
COGEN	Cogeneration Plants built and operated by Tihama Power
ECA	Energy Conversion Agreement
GI	General Instruction
IT	Information Technology Department
PDD	Power Distribution Department
PI	Tihama Power Plant Information System
SES	Service Entry Sheet
SSFDM	Settlement System & Fuel Demand Application
TPGC	Tihama Power Generation Company Ltd.

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1.2. Definitions of Words and Phrases:

Host Plant – Uthmaniyah Gas Plant, Shedgum Gas Plant, and Juaymah NGL Fractination, or Ras Tanura Refinery

Cogen Plant – Uthmaniyah, Shedgum, Juaymah , or Ras Tanura Cogen Plants

2. BACKGROUND & PURPOSE

Saudi Aramco and TPGC executed four (4) long-term ECAs in December 2003 whereby TPGC would construct and operate gas turbine Power and Steam Cogen Plants at the Company's Host Plants.

The ECAs incorporate a BOOT (build, own, operate and transfer) model spanning 20 years. As specified by the agreements, TPGC will issue individual monthly invoices for Power and Steam services for each location. The total ECA value is estimated to exceed \$2.4 billion.

This instruction was created in response to the complexity of the TPGC billing process notably ECA Appendix K, Calculation of Payment, which utilizes a large number of data elements, formulas and related provisions.

3. SCOPE

3.1. Invoice review and approval process including:

- Managing the SSFDM application,
- Importing and verifying monthly operations data,
- Verifying Power and Steam charges,
- Invoice review, coding and SES requirements,
- Partial month invoices.

3.2. Monthly Power and Steam invoice accruals.

4. COMPANY POLICIES & OTHER PUBLICATIONS

4.1. References to Company Policies:

- AI 707: *Payments to Contractors and Vendors*
- AI 810: *Purchased Electric Power*
- GI 230.035: *Invoice Accrual Procedures*
- GI 287.002-1: *Tihama Power Prior Period Adjustments, Late Payment Fees and Disputed Payments*

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4.2. References to Other Publications and Documents:

- *Energy Conversion Agreements* dated December 20, 2003
- *Excel Settlement System & Fuel Demand Model (SSFDM) User Guide*
- *Tihama Power Generation Co. Ltd, Settlement System, Agreed Procedures*
- Power Distribution Department White Paper: *Administration & Management of 3rd Party Cogeneration Plants (UGP, SGP, JNGLF, RTR)*, dated: February 13, 2006

5. RESPONSIBILITIES

For the avoidance of doubt, the following summarizes the responsibilities identified in the above referenced publications and incorporated herein.

- 5.1. PDD is the overall Contract Administrator for the ECAs and is the main Proponent for TPGC.
- 5.2. Host Plants are the Proponents for validating and approving monthly operational data as presented on the Linkage worksheet.
- 5.3. PDD is the Proponent to verify Power-related invoices.
- 5.4. Host Plants are the Proponents for Steam-related invoices and payments and ensuring timely processing and payment of Power-related invoices.

6. SSFDM APPLICATION OVERVIEW

The Excel-based SSFDM application was developed by TPGC in cooperation with Saudi Aramco to support the invoice verification process. The application is a single Excel workbook that imports and validates data; performs required calculations; and produces reports. All required data is imported into the application via a monthly text file upload process. Source data is extracted from the PI. As part of the monthly invoicing process, TPGC provides copies of monthly PI reports, which are subsequently compared to reports produced by the SSFDM application. Please note the SSFDM model is designed to process data for a single month. Accordingly, files for individual months must be retained for reference and audit purposes.

As the SSFDM application is an integral component of the invoice review process, control over the model must be maintained at all times. Modifications and/or updates to the application shall be coordinated through PDD. SSFDM application modifications must be thoroughly reviewed and tested by relevant subject matter experts including, but not limited to, IT, Finance, Host Plants and PDD. The SSFDM application is password protected to prevent unauthorized modification.

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The SSFDM User Guide provides an overview of the application and documentation of all calculations utilized in the billing process.

7. COMMERCIAL OPERATION DATES

Several economic data elements including the Saudi Consumer Price Index and US Producer Price Index are utilized in SSFDM application. Indices are adjusted annually based on plant Commercial Operation Dates (COD) outlined below. Due to publication delays, annual updates may be delayed for several months impacting previously invoiced months. GI 287.002-1, Tihama Power Prior Period Adjustments, Late Payment Fees and Disputed Payments, provides guidelines for handling prior month invoice adjustments.

Cogen Plant	Commercial Operation Date
Uthmaniyah	March
Shedgum	June
Ras Tanura	September
Juaymah	December

8. CHARGE CALCULATION REPORTS

The SSFDM application includes approximately (40) worksheets containing various operational and finance-related schedules. The following table identifies financial schedules supporting TPGC's monthly invoices collectively indentified as the Charge Calculation Reports (CCR). Reports supporting Power and/or Steam related charges are identified by an "X" in the designated columns below.

Worksheet	Description	Power	Steam
Summary	Summary of Power and Steam Charges	X	X
CPP	Capacity Payment for Power	X	
OPP	Output Payment for Power	X	
CPS	Capacity Payment for Steam		X
FAC	Feedwater Adjustment		X
SUP	Start-up Costs	X	
ER	Exchange Rates	X	X
IP	Input Parameters	X	X
ADO	Adjustments and Overrides	X	X
Invoice Power	Pro Forma Invoice	X	
Invoice Steam	Pro Forma Invoice		X
SM	Schedule Maintenance	X	X
A-1	Table A-1, Contracted Power Capacity	X	
A3-1	Table3-1, Projected Availability of Net Power Output	X	
A5-1	Table A5-1, Payment Deduction Factor for Power	X	
B-1	Table B-1, Contracted Steam Capacity		X
B3-1	Table B3-1, Projected Availability of Net Steam Output		X
B5-1	Payment Deduction Factor for Steam		X
Linkage	Linkage and Deemed Availability Calculation	X	X
Setup	Contract year control schedule	X	X

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RAKPAGE NO.
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The invoice review and approval process is dependent upon successfully importing data into the SSFDM Application and verifying monthly operations data. TPGC Settlement System, Agreed Procedure #10, Monthly Billing, outlines the data upload process and related activities. The following key controls are identified with this activity:

- 9.1. Ensure the data import process is successfully completed as outlined in the SSFDM User Guide, Section 1.6. Verify the Control worksheet in the SSFDM application reflects the correct site, billing month and COD.
- 9.2. Review and approve the monthly operations data presented on the Linkage worksheet. Appendix A provides an example of an approved Linkage worksheet. This action is completed by the Host Plants and is necessary to ensure the accuracy of both Power and Steam invoices.
- 9.3. Verify monthly SSFDM CCR reports agree to PI CCR reports provided by TPGC. Small differences (+/- \$500) may occur due to rounding and are acceptable.

In the event errors are encountered, PDD should be contacted to coordinate required corrective actions with TPGC.

Retain documentation of the review process for reference and audit purposes.

10. POWER & STEAM SHARED DATA ELEMENTS

Power and Steam invoice calculations utilize data included on the CCR schedules identified below. In order to ensure the accuracy of TPGC invoices, the following procedures should be performed. Retain documentation of the review process for reference and audit purposes.

Detailed descriptions of all schedules can be found in the SSFDM User Manual. Report samples and accompanying notes are provided at Appendix B.

As discussed above, the Linkage worksheet must be reviewed and approved by the Host Plants prior to completing the following procedures.

- 10.1. ADO, Adjustments and Overrides, Schedule – As indicated in the notes section on the schedule, perform the following steps:
 - Verify amounts agree to values presented on the approved Linkage worksheet.
 - Please note meter reading values are populated by the input process but do not impact the monthly invoice calculations. No actions are required.

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10.2. IP, Input Parameters, Schedule – perform the following steps:

- Review the Top Section of the report containing location, billing period, invoice date and operating year; ensure contents represent expected values, or blank for invoice date.
- Middle Section, items 1 – 13:
 - Items 1 – 2, Ensure the Saudi Riyal / Dollar exchange rates reflect 0.26667, unless otherwise instructed by PDD and approved by Finance and Tihama.
 - Items 3 – 6, Verify Price Indices agree to the prior month, ECA contract schedules, or as subsequently agreed between Saudi Aramco and TPGC. If updates are noted, verify new values as per the instructions provided in the TPGC Settlement System, Agreed Procedure #10, Monthly Billing. Price indices are updated annually based upon COD values as discussed in Section 6, above.
 - Items 7 – 8A, Vouch Start Values to the Linkage worksheet.
 - Items 9 - 13, Review for reasonableness utilizing prior month IP schedules as a baseline. Investigate significant deviations.
- Items 14 – 23, Bottom Section, agree to prior month, ECA contract schedules, or as subsequently agreed between Saudi Aramco and TPGC. Investigate any deviations.

10.3. SM, Scheduled Maintenance, Schedule – perform the following steps:

- Monthly values in the body of the schedule are derived by formulas with the exception of the monthly Planned Unavailability values, LCPpm^P and LCSpm^P, which originate from the upload file. For the current month, agree the Planned Unavailability Value to the current year Scheduled Maintenance program as defined by TPGC Settlement System, Agreed Procedure #5, Scheduled Maintenance.
- Contract Year Values, LCPpn^P and LCSpn^P, are populated based upon values presented on Tables A3-1 and B3-1 for Power and Steam, respectively. Review the schedules for completeness and accuracy. Agree amounts to the prior month, ECA contract schedules, or as subsequently agreed between Saudi Aramco and TPGC.
- Verify amounts identified as “Values Used for Billing Month” in the Planned Unavailability Columns, LCPpm^P and LCSpm^P and ensure they do not exceed the contract values identified in the above bullet.

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10.4. ER, Exchange Rates, Schedule – Verify exchange rates are equal to 0.26667 unless otherwise communicated by PDD.

10.5. Setup Schedule – Ensure the schedule reflects “NO” in the column entitled “Transfer to Reserve” for contract years 1 – 18.

11. APPROVING POWER CHARGES

Power calculations utilize data contained on the following CCR schedules. In order to ensure the accuracy of TPGC invoices, the following procedures should be performed. Detailed schedule descriptions are provided in the SSFDM User Manual. Appendix C provides examples and additional notes. Retain documentation of the review process for reference and audit purposes.

To facilitate the review process, an Invoice Review Checklist for Power Services is provided at Appendix G.

Ensure the Linkage and Power & Steam shared data worksheets are reviewed and approved by Host Plants prior to completing the following procedures.

11.1. CPP, Capacity Payment for Power, Schedule – perform the following steps:

- Review the calculations supporting the following values for accuracy and completeness;
 - Fixed Capital Component of Capacity Payment for Power, and
 - Fixed O&M Component of Capacity Payment for Power.
- Agree amounts to supporting schedules (ADO, IP, SM and Tables A-1 and A3-1) as indicated in the notes section.
- The “Deduction for Reduced Power Availability” should be reviewed to ensure the appropriate Payment Deduction Factor for Power is calculated by the model as outlined in the notes section.
- Compare data to the PI CPP report and verify no material differences exist. Minor rounding differences may occur and are acceptable. ECA Appendix K, page K-3, discusses the impact of rounding to five decimal places and the likelihood of minor discrepancies between the SSFDM application and PI system reports.

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11.2. OPP, Output Payment for Power, Schedule – perform the following steps:

- Review the calculations supporting the following values for accuracy and completeness;
 - Fuel Adjustment Component, and
 - Variable O&M Component of Output Payment for Power.
- Agree amounts to supporting schedules (ADO, IP) as indicated in the notes section.
- Compare data to the PI CPP report and verify no material differences exist. Minor rounding differences may occur and are acceptable. ECA Appendix K, page K-3, discusses the impact of rounding to five decimal places and the likelihood of minor discrepancies between the SSFDM application and PI system reports.

11.3. SUP, Start-up Cost, Schedule – perform the following steps:

- Review the Start-up Payment calculations for accuracy and completeness. Verify chargeable start counts based on methodology outlined in the notes section.
- Agree amounts to supporting IP schedule as indicated in the notes section.
- Compare Start-up values to the PI CPP report. Values should agree. Contact TPGC to resolve any exceptions.

11.4. Supporting Tables A-1, A3-1 and A-5 should be reviewed against ECA Appendix K schedules, or as agreed between Saudi Aramco and TPGC, on not less than an annual basis.

12. APPROVING STEAM CHARGES

Steam invoice calculations utilize data contained on the following CCR schedules. In order to ensure the accuracy of TPGC invoices, the following procedures should be performed. Detailed schedule descriptions can be found in the SSFDM User Manual. See Appendix D for examples and additional notes. Retain documentation of the review process for reference and audit purposes.

To facilitate the review process, an Invoice Review Checklist for Steam Services is provided at Appendix H.

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Ensure the Linkage and Power & Steam shared data worksheets are reviewed and approved prior to completing the following procedures as discussed in sections 9 and 10, above.

12.1. CPC, Contracted Power Capacity, Schedule – perform the following steps:

- Review the calculations supporting the following values for accuracy and completeness;
 - Fixed Capital Component of Steam Capacity Payment,
 - Fixed O&M Component of Capacity Payment for Steam.
- Agree amounts to supporting schedules (ADO, IP, SM and Tables B-1 and B3-1) as indicated in the notes section.
- The “Deduction for Reduced Steam Availability (O&M)” should be reviewed to ensure the appropriate Payment Deduction Factor for Power is calculated by the model.
- Compare data to PI CPP report and verify no material differences exist. Minor rounding differences may occur and are acceptable. ECA Appendix K, page K-3, discusses the impact of rounding to five decimal places and the likelihood of minor discrepancies between the SSFDM application and PI system reports.

12.2. FAC, Feedwater Adjustment, Schedule – perform the following steps:

- Review the Feedwater Adjustment Component calculations for accuracy and completeness.
- Agree amounts to supporting schedule, ADO, as indicated in the notes section.
- Compare Feedwater values to the PI CPP report. Values should agree. Contact TPGC to resolve any exceptions.

12.3. Supporting Tables B-1, B3-1 and B-5 should be reviewed against ECA Appendix K schedules, or as agreed between Saudi Aramco and TPGC, on not less than an annual basis.

13. INVOICE CODING AND APPROVALS

Power and Steam invoice calculations are aggregated on the Summary worksheet and presented on pro forma invoices in the SSFDM application. In order to ensure the accuracy of TPGC payments, the following procedures should be performed. Detailed schedule

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descriptions can be found in the SSFDM User Manual. See Appendix E for examples and additional notes. Retain documentation of the review process for reference and audit purposes.

13.1. Summary Schedule – perform the following steps:

- Review payment calculations (subtotals and totals) for accuracy and completeness.
- Agree amounts to supporting schedules (CPP, OOP, CPS, FAC and SUP) as indicated in the notes section.
- Review Ancillary Service fees for reasonableness. Investigate any material or unusual amounts.
- Compare data to PI's Summary report and verify no material differences exist. Minor rounding differences may occur and are acceptable. ECA Appendix K, page K-3, discusses the impact of rounding to five decimal places and the likelihood of minor discrepancies between the SSFDM application and PI system reports.
- Ensure values presented on the Invoice Power and Invoice Steam worksheets agree to the Summary values identified above.
- For contract years 19 and 20, ensure the 5% Transfer Reserve Deduction is included on the monthly Power and Steam invoices in accordance with ECA Section 21.4, Transfer Reserve. Note the Transfer Reserve Deduction is not included on the CCR reports. The Transfer Reserve is only reflected on the pro forma invoice worksheets.

13.2. The following table provides an overview of Power and Steam invoice coding requirements as of January 1, 2010. Coding instructions for prior years may be found in Appendix F.

Cogen Plant	Cost Center	Account No.	Account Description
<u>Power Charges</u>			
Uthmaniyah	213502	7408201	Capital Leases – Power Only
Shedgum	212502	7408201	Capital Leases – Power Only
Ras Tanura	381570	7408201	Capital Leases – Power Only
Juaymah	214842	7408201	Capital Leases – Power Only
<u>Steam Charges</u>			
Uthmaniyah	213502	7408200	Capital Leases – Excludes Power
Shedgum	212502	7408200	Capital Leases – Excludes Power
Ras Tanura	381570	7408200	Capital Leases – Excludes Power
Juaymah	214844	7408200	Capital Leases – Excludes Power

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- Auxiliary Power Payments and Ancillary Services (Potable & Utility Water) charges/credits should be charged to account 7408200. Due to system limitations and the immaterial nature of these amounts, additional accounts will not be utilized.
- Transfer Reserve Deductions (applicable to contract years 19 and 20 only) should be recorded to account 3003038, Unpaid Final Release Agreements. Please refer to AI 707, Payments to Contractors and Vendors, for additional instructions regarding the handling of contract retentions.

- 13.3. Power and Steam Proponents should ensure Service Entry Sheets (SES) are submitted by TPGC and approved in a timely manner as provided in AI 707, Payments to Contractors and Vendors. A provision for late payment fees is incorporated in ECA Section 10.3, Late Payments. Delayed payments should be avoided, if possible.

As noted above, minor rounding differences may occur between the SSDFM and PI CCR reports. For rounding differences less than \$500, invoices presented by TPGC should be approved for payment.

For rounding and other reconciling amounts exceeding \$500, where the issue cannot be resolved by importing a revised text data file or through discussions with PDD and TPGC, please see GI 287.002-1, Tihama Power Prior Period Adjustments, Late Payment Fees and Disputed Payments, for additional guidance and instructions.

- 13.4. If a partial month billing is required caution should be exercised as the SSFDM application is not designed to handle this situation. A review of individual calculations will likely be required.
- 13.5. In the event Prior Period Adjustments, Late Payment Fees, and/or Disputed Payments are encountered, please refer to GI 287.002-1, Tihama Power Prior Period Adjustments, Late Payment Fees and Disputed Payments.

14. MONTH-END POWER AND STEAM ACCRUALS

TPGC monthly invoices are generally provided in the month following delivery of services (i.e. June invoices are received and processed in the month of July.) In accordance with GI 230.035, Invoice Accrual Procedures, a monthly accrual is required for unbilled Power and Steam charges as they will exceed the \$100,000 unbilled cost threshold established by the company. Coding instructions provided above shall be used in the accrual process.

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Monthly accruals should reflect reasonable estimates taking into consideration the current operating environment and prior months charges, which can serve as the basis for preparing current month accruals.

Approved: Original Approved by R. A. KRYGSMAN
R. A. KRYGSMAN, Manager
Accounting Policies & Systems Department

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APPENDIX A – LINKAGE WORKSHEET

The following is an example of an approved Linkage worksheet containing monthly operations data used in the SSFDM application. Key attributes of the review process include:

- Reference to source reports
- Check marks (✓) verifying review of data points
- Notes explaining any unusual values/circumstances
- Signature, badge number and date indicating review and approval of contents

Checked against DE reports
Used reports 10411
Charge Calculation and same process as TSP plant meter reports
Monthly readings checked against TSP plant meter reports
Reasonableness & daily totals checked against HPL Report

Linkage and Deemed Availability Calculation

Date	Unit 1 Successful Starts	Unit 2 Successful Starts	Projected Available Power Capacity (MW)	Unavailable Net Power Output (MW) LCPm	Duration of Power Unavailability (Minutes) UDP	Projected Available Steam Capacity (1,000 lb/hr) LCPm	Unavailable Net Steam Output (1,000 lb/hr) LCPm	Duration of Steam Unavailability (Minutes) UDS	YEB/ESA Risk Event During the Day (Type 9.4a)	Actual Net Power Output (kW) LCPm	Imported Auxiliary Power (kW) LCPm	Actual Feedwater Demand For Billing Period (1,000 lb) FWDm	Actual Net Steam Output (1,000 lb) FWDm	Projected Fuel Demand FWDm	Actual Fuel Demand FWDm	Gross Elec. Output (REC) (MWh)
January 1, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,583,862.72	0.00	23,676.94	23,676.94	81,246.77	73,025.81	7,360.88
January 2, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,535,961.69	0.00	23,714.23	23,623.46	81,090.02	73,005.11	7,408.13
January 3, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,531,346.38	0.00	23,681.02	23,665.02	81,010.00	73,005.06	7,478.85
January 4, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,410,025.91	0.00	23,653.38	23,653.38	80,187.80	73,201.42	7,468.11
January 5, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,140,612.47	0.00	23,571.17	23,571.17	79,281.40	73,168.16	7,509.78
January 6, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,136,912.09	0.00	23,475.49	23,475.49	77,807.67	72,894.00	7,420.86
January 7, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,122,250.03	0.00	23,382.12	23,382.12	76,618.00	73,725.36	7,489.16
January 8, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,232,401.03	0.00	23,996.94	23,996.94	76,404.23	73,085.24	7,524.83
January 9, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,262,050.63	0.00	23,965.36	23,965.36	76,730.21	73,081.03	7,520.28
January 10, 2007			7,324.00	3,519.93	1,361	30,192.00	14,569.03	1,301		7,922,050.63	0.00	22,256.77	22,256.77	44,516.30	40,158.22	6,063.41
January 11, 2007			7,324.00	3,509.80	1,360	30,192.00	14,467.03	1,301		4,245,895.86	0.00	20,597.08	20,597.08	44,516.30	40,158.22	6,063.41
January 12, 2007			7,324.00	918.03	243	30,192.00	2,847.03	243		4,194,861.59	0.00	20,291.54	20,291.54	43,516.17	40,158.22	5,749.37
January 13, 2007			7,324.00	0.00	0	30,192.00	0.00	0		6,064,735.53	0.00	21,475.33	21,475.33	64,414.14	63,158.22	6,135.48
January 14, 2007			7,324.00	0.00	0	30,192.00	0.00	0		6,201,135.33	0.00	21,776.02	21,776.02	77,024.83	72,228.06	7,469.82
January 15, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,292,916.72	0.00	21,637.90	21,637.90	77,584.53	71,029.93	7,469.82
January 16, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,144,726.13	0.00	21,644.39	21,644.39	75,053.82	72,804.01	7,474.27
January 17, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,733.64	73,675.21	7,461.63
January 18, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,331,182.72	0.00	21,885.06	21,885.06	75,053.82	74,276.91	7,410.24
January 19, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,378,026.81	0.00	21,920.50	21,920.50	75,912.47	74,610.59	7,410.24
January 20, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,331,182.72	0.00	21,903.63	21,903.63	75,912.47	74,610.59	7,410.24
January 21, 2007			7,324.00	1,002.94	0	30,192.00	4,340.14	414		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 22, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 23, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 24, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 25, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 26, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 27, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 28, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 29, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 30, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
January 31, 2007			7,324.00	0.00	0	30,192.00	0.00	0		8,246,736.50	0.00	21,703.12	21,703.12	75,912.47	74,610.59	7,410.24
Total/Value	0	0	227,668.80	8,700.74	3,421	935,952.00	36,863.48	3,421	YEB/ESA Risk Event Occurred	239,016,898.58	0.00	818,039.61	818,039.61	2,311,600.02	2,145,811.59	222,474.11

LCPlm UDS LCPm UDS FWDm

Calculation of Deemed Available Power & Steam (DAPC & DASC) %age To Be Carried Forward To Future Billing Months

Projected Available Capacity (MW)	Net Power Output Actually Unavailable (MW)	Projected Available Capacity (1,000 lb/hr)	Net Steam Output Actually Unavailable (1,000 lb/hr)	Comment
227,668.80	8,700.74	935,952.00	36,863.48	The DAPC & DASC %ages will be used in future Deemed Availability calculations
DAPC	96.17%	DASC	96.17%	

Previous Power DAPC & DASC %ages

Month	% of DAPC	% of DASC	SA Risk Event During Month? (YES)	% Used In Average DAPC Calculation	% Used In Average DASC Calculation
January-2006	100.00%	100.00%		100.00%	100.00%
February-2006	100.00%	100.00%		100.00%	100.00%
March-2006	100.00%	100.00%		100.00%	100.00%
April-2006	100.00%	100.00%		100.00%	100.00%
May-2006	100.00%	100.00%		100.00%	100.00%
June-2006	100.00%	100.00%		100.00%	100.00%
July-2006	100.00%	100.00%		100.00%	100.00%
August-2006	100.00%	100.00%		100.00%	100.00%
September-2006	100.00%	100.00%		100.00%	100.00%
October-2006	100.00%	100.00%		100.00%	100.00%
November-2006	100.00%	100.00%		100.00%	100.00%
December-2006	85.89%	85.89%		85.89%	85.89%
Average	99.50%	99.50%		99.50%	99.50%

Uthman Al-Dakhoul #215186
 Saeed M. Al-Ghannash #285595
 Mohammad S. Al-Jawhri #265994
 Dhana O. Steffens #800721

Will be 0 as at least one unit running the entire month. Also, see report 9

Fuel demand model reports reviewed for reasonableness after checking gas meter hourly volumes for reasonableness. See reports 7 & 8.

X - revised gas meter readings caused FWDm to change. Checked revised readings and they are ok

HAJOP Cogan - 12-0006 & 61-2007JUP SSFDM Version 1.0 (JAN 2007 updated v3 file)

Printed: 2/16/2007 5:50 PM

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NEW INSTRUCTION X

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APPENDIX B – POWER AND STEAM SHARED CCR REPORTS

ADO Worksheet – Adjustment and Overrides Example

Adjustments and Overrides

[BACK to CONTROL Sheet](#)

Parameter No.	Description	ECA Definition	Adjust Value	Units	Notes
1	Actual Net Dependable Power Capacity		222,679	MWh	? Value derived from the Linkage sheet cell E35
2	Net Power Output Actually Unavailable	LCP _{am}	74,149	MWh	? Value derived from the Linkage sheet cell F35
3	Net Dependable Power Capacity (Reference Site Conditions)	DCP	299.30	MW	? Value derived from the Variables sheet cell B19
4	Deemed Available Power Capacity To Date <i>Informational Only</i>		96.34%	%	? Value derived from Linkage sheet cell J57
5	Actual Net Power Output	E _{am}	128,560,750	kWh	? Value derived from Linkage sheet cell L35
6	Actual Net Power Output Metered For The Month (2 pm Reading)		210,900	kWh	Monthly Meter Reading - As measured at 2 pm on the last day of the Billing Month in accordance with section 11.2 of the ECA (Imported from Text file)
7	Total Length of Unavailability for Power <i>Informational Only</i>	UDP _i	458.07	Hours	? Value derived from the Linkage sheet cell G35 divided by 60
8	Actual Net Dependable Steam Capacity		898,968	1000 lb/hr	? Value derived from the Linkage sheet cell H35
9	Net Steam Output Actually Unavailable	LCS _{am}	297,208	1000 lb	? Value derived from the Linkage sheet cell I35
10	Net Dependable Steam Capacity (Reference Site Conditions)	DCS	1,208.29	1000 lb/hr	? Value derived from the Variables sheet cell B20
11	Deemed Available Steam Capacity To Date <i>Informational Only</i>		96.47%	%	? Value derived from Linkage sheet cell K57
12	Actual Net Steam Output	S _{am}	562,136	1000 lb	? Value derived from Linkage sheet cell O35
13	Actual Net Steam Output Metered for the Month (2 pm Reading)		0	1000 lb	Monthly Meter Reading - As measured at 2 pm on the last day of the Billing Month in accordance with section 11.2 of the ECA (Imported from Text file)
14	Total Length of Unavailability for Steam <i>Informational Only</i>	UDS _i	458.07	Hours	? Value derived from the Linkage sheet cell J35 divided by 60
15	Projected Fuel Demand	FD _{pm}	#NAME?	10 ⁶ BTU	? Value derived from the Linkage sheet cell P35
16	Actual Fuel Demand	FD _{am}	1,276,339	10 ⁶ BTU	? Value derived from the Linkage sheet cell Q35
17	Actual Feedwater Demand	FWD _{am}	549,726	1000 lb	? Value derived from the Linkage sheet cell N35
18	Auxiliary Power Metered for the Month		36,500	kWh	? Value derived from the Linkage sheet cell M35

Notes are provided on the worksheet to assist in validating data with source schedules.

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APPENDIX B – POWER AND STEAM SHARED CCR REPORTS (con't)

IP Worksheet – Input Parameter Example

INPUT PARAMETERS

[BACK to CONTROL Sheet](#)

Parameter No.	Description	ECA Definition	Value	Units	Notes
	Location		UTHMANIYAH		Value held in Variables sheet (Location name decoded from site ID in import file)
	Billing Period		May-2007		Value held in Variables sheet (Input by Import file)
	Invoice Date				
	Operating Year		2		Value held in Variables sheet (Input by Import file)
1	Saudi Riyal / Dollar Exchange Rate (Billing Period)	EXR _m	0.26667		Value held in Exchange Rate Sheet ER Cell D35
2	Saudi Riyal / Dollar Exchange Rate (Reference Exchange Rate)	EXR _r	0.26667		Fixed value (SAR 1 = \$0.26667 EXRr rounded to 5 dp) (SAR 3.750 = \$1)
3	Saudi Consumer Price Index (Billing Period)	SCI _m	104.2		Saudi Consumer Price Index as applicable for Billing Period m (Input by Import file)
4	Saudi Consumer Price Index (Reference January 1, 2003)	SCI _r	98.6		Fixed value Reference Saudi Consumer Price Index on January 1, 2003
5	US Producer Price Index (Item 3511-1) for the Billing Period	USPI _m	170.2		Input by Import file
6	US Producer Price Index (Item 3511-1) for January 1, 2003	USPI _r	153.5		Fixed reference value of 173.0
7	Unit 1 - Number of Scheduled Successful Starts for this Contract Year		2		Sum of Values held in Linkage Sheet Cells C35 & C41
7A	Unit 1 - Number of Scheduled Successful Starts for this Billing Period		0		Value held in Linkage Sheet Cells C35
8	Unit 2 - Number of Scheduled Successful Starts this Contract Year		1		Sum of Values held in Linkage Sheet Cells D35 & D41
8A	Unit 2 - Number of Scheduled Successful Starts for this Billing Period		0		Value held in Linkage Sheet Cells D35
9	Auxiliary Power Payment Tariff		0.0098833	\$ / kWh	Auxiliary Power Tariff = (CCRP _m + FOMRP _m + VOMR _m) / 100 NOTE - This does not cover SA Risk Event when Auxiliary Power is provided free of charge under the ECA Agreement
10	Ancillary Services - Potable Water		80,063.0	Gallons	Input by Import file
11	Ancillary Services - Utility Water		54,262.0	Gallons	Input by Import file
12	Non-Conforming Gas & Feedwater Payment			\$	
13	Measuring Tolerance Fuel Demand	MTFD	1.00000%	%	MTFD = ± 1.0 %
14	Capital Cost Recovery Charge Rate (Power)	CCRP	0.70415	US Cents/kWh	Fixed value of 0.69255 US Cents/kWh
15	Local Portion of CCRP	Y _{CCRP}	0.00000%	%	Fixed value of 0 %
16	Fixed O&M Cost Recovery Charge Rate (Power)	FOMRP	0.15799	US Cents/kWh	Fixed value of 0.15799 US Cents/kWh
17	Local Proportion of FOMRP	Y _{FOMRP}	6.00000%	%	Fixed value of 6.0%
18	Variable O&M Cost Recovery Charge Rate (Power)	VOMR	0.09898	US Cents/kWh	Fixed value of 0.09898 US Cents / kWh
19	Local Proportion of VOMR	Y _{VOMR}	5.00000%	%	Fixed value of 5.0%
20	Capital Cost Recovery Charge Rate (Steam)	CCRS	0.56039	\$ / 1,000 lb	Fixed value of \$ 0.54879 / 1,000 lb
21	Local Portion of CCRS	Y _{CCRS}	0.00000%	%	Fixed value of 0 %
22	Fixed O&M Cost Recovery Charge Rate (Steam)	FOMRS	0.15754	\$ / 1,000 lb	Fixed value of \$ 0.15754 / 1,000 lb
23	Local Proportion of FOMRS	Y _{FOMRS}	22.00000%	%	Fixed value of 22%

Notes are provided on the worksheet to assist in validating data with source schedules.

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APPENDIX B – POWER AND STEAM SHARED CCR REPORTS (con't)

SM Worksheet – Scheduled Maintenance Example

Scheduled Maintenance

[BACK to CONTROL Sheet](#)

MONTH	POWER (MWh)				STEAM (1,000 lb)			
	Unplanned Unavailability	Planned Unavailability	Total Projected Unavailability	Billing Month Actual Unavailability	Unplanned Unavailability	Planned Unavailability	Total Projected Unavailability	Billing Month Actual Unavailability
	$LCP_{pn}^U / 12$	LCP_{pm}^P	LCP_{pm}	LCP_{am}	$LCS_{pn}^U / 12$	LCS_{pm}^P	LCS_{pm}	LCS_{am}
March-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
April-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
May-2007	10,686.17	64,656.00	75,342.17	74,148.51	44,656.42	270,190.00	314,846.42	297,207.98
June-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
July-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
August-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
September-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
October-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
November-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
December-2007	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
January-2008	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
February-2008	10,686.17	0.00	10,686.17		44,656.42	0.00	44,656.42	
TOTALS	128,234.00	64,656.00	192,890.00		535,877.00	270,190.00	806,067.00	
Contract Year Values	LCP_{pn}^U	LCP_{pm}^P	LCP_{pm}		LCS_{pn}^U	LCS_{pm}^P	LCS_{pm}	
	128,234.00	64,656.00	192,890.00		535,877.00	270,190.00	806,067.00	
Values Used For Billing Month	$LCP_{pn}^U / 12$	LCP_{pm}^P	LCP_{pm}	LCP_{am}	$LCS_{pn}^U / 12$	LCS_{pm}^P	LCS_{pm}	LCS_{am}
	10,686.17	64,656.00	75,342.17	74,148.51	44,656.42	270,190.00	314,846.42	297,207.98

Notes

MONTH - The months/years displayed are calculated from the Commercial Operation Date incremented by the Billing Month Contract Year.
 $LCP_{pn}^U / 12$ & $LCS_{pn}^U / 12$ - These are the same for each month in a Contract Year and are 1/12 th per month of the values in the tables A3-1 & B3-1.
 LCP_{pm}^P & LCS_{pm}^P - These values are imported from the Text file.
 $LCP_{pm} = LCP_{pn}^U / 12 + LCP_{pm}^P$
 $LCS_{pm} = LCS_{pn}^U / 12 + LCS_{pm}^P$
 LCP_{am} - Only the value for the current Billing Month is displayed and is derived from the Linkage sheet Cell F35
 LCS_{am} - Only the value for the current Billing Month is displayed and is derived from the Linkage sheet Cell I35
Contract Year Values - These are derived from tables A3-1 & B3-1 for comparison with the monthly value totals.
Values Used For Billing Month - Used as a 'fixed' source for other formulas to reference, rather than look up the values from the Scheduled Maintenance table within the formulas.

A₁ / **A₂** Must agree to annual scheduled maintenance.

B₁ / **B₂** Originate from worksheets A3-1 and B3-1 representing annual planned unavailability.

By definition, annual scheduled maintenance (**A₁** **A₂**) cannot exceed contracted planned unavailability values (**B₁** **B₂**).

Verification of LCPpmP and LCSpmP volumes, monthly planned unavailability, is important as the values directly impact deductions for plant unavailability. Deductions may exceed hundreds of thousands of dollars if a plant's availability is less than 100% for several days.

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ER Worksheet – Exchange Rate Example

EXCHANGE RATES[BACK to CONTROL Sheet](#)

Billing Period Day	Input Value	Exchange Rate	Notes
1	3.75	0.26667	Billing Period Day derived from HMR_Data sheet Time Period column
2	3.75	0.26667	
3	3.75	0.26667	Input Values are imported from the input text file
4	3.75	0.26667	
5	3.75	0.26667	
6	3.75	0.26667	
7	3.75	0.26667	
8	3.75	0.26667	
9	3.75	0.26667	
10	3.75	0.26667	
11	3.75	0.26667	
12	3.75	0.26667	
13	3.75	0.26667	
14	3.75	0.26667	
15	3.75	0.26667	
16	3.75	0.26667	
17	3.75	0.26667	
18	3.75	0.26667	
19	3.75	0.26667	
20	3.75	0.26667	
21	3.75	0.26667	
22	3.75	0.26667	
23	3.75	0.26667	
24	3.75	0.26667	
25	3.75	0.26667	
26	3.75	0.26667	
27	3.75	0.26667	
28	3.75	0.26667	
29	3.75	0.26667	Days 29 to 31 not shown for months where day would exceed no of days in the month Where a day is not applicable to the Billing Month no data is imported
30	3.75	0.26667	
31	3.75	0.26667	
AVERAGE (Monthly Exchange Rate EXRm)		0.26667	? Average of daily rates rounded to 5dp
Reference Exchange Rate (EXRr)		0.26667	? Value held in Sheet IP cell E10

Exchange rate values should reflect 0.26667 unless otherwise communicated by PDD.

Notes are provided on the worksheet to assist in validating data with source schedules.

APPENDIX B – POWER AND STEAM SHARED CCR REPORTS (con't)

Setup Worksheet – Example

[BACK to CONTROL Sheet](#)

Commercial Operation Date	March 1, 2006
---------------------------	---------------

Contract Year	Transfer to Reserve YES/NO
1	NO
2	NO
3	NO
4	NO
5	NO
6	NO
7	NO
8	NO
9	NO
10	NO
11	NO
12	NO
13	NO
14	NO
15	NO
16	NO
17	NO
18	NO
19	YES
20	YES

Assistant Controller
Operations Accounting
Box 5000
Saudi Arabian Oil Company
Dhahran 31311
Saudi Arabia

Settlement Period Title
May 2007

Notes
Address used for Power and Steam invoice.
It is derived by formula using the Billing Period month entered in the IP sheet to lookup the month name. The Billing Month year is appended to the 'lookup' result

Reserve retentions will occur in contract years 19 and 20. All other years should reflect a "NO" value in the "Transfer to Reserve" column.

Notes are provided on the worksheet to assist in validating data with source schedules.

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APPENDIX C –POWER CHARGE REPORTS

CPP Worksheet –Capacity Payment for Power Example

CAPACITY PAYMENT FOR POWER

[BACK to CONTROL Sheet](#)

Description	ECA Definition	Value	Units	Notes
Fixed Capital Component of Capacity Payment for Power				
Component AP	AP_m	#VALUE!	\$	AP _m = FCPP _m - DRAP _m
Base Capital Payment for Power	FCPP _m	#VALUE!	\$	FCPP _m is calculated below in cell D9
Deduction for Reduced Power Availability	DRAP _m	#N/A	\$	DRAP _m is calculated below in cell D34
Base Capital Payment for Power				
Capital Cost Recovery Charge Rate for Net Dependable Power	CCRP _m	#VALUE!	US Cents/kWh	FCPP _m = CCRP _m * DCP * PH _m * 10
Capital Cost Recovery Charge Rate	CCRP	0.70415	US Cents/kWh	CCRP _m = (CCRP * YCCRP * EXR / EXR _m) + (CCRP * (1 - YCCRP))
Local Portion of CCRP	YCCRP	0.0%	%	Value held in sheet P cell E25
Reference Exchange Rate	EXR _r	0.26667		Value held in sheet P cell E26
Exchange Rate	EXR _m			Value held in sheet P cell E10
Projected Available Net Power Output (Contract Year) <i>Informational only</i>	AGP _{pn}	#N/A	MWh	Value held in sheet P cell E9
				AGP _{pn} = PH _m * CCRP _m - (LCP _{pn} ^U + LCP _{pn} ^P)
Contracted Power Capacity	CCP _n	#N/A	MW	Looks up the CCP _n value from a table held in sheet A-1 based on the Operating Year held in the Input Sheet (IP)
Net Dependable Power Capacity (Latest Tested, at Reference Site Conditions)	DCP	-	MW	Value held in sheet ADO cell E5
Total Hours in the Billing Period	PH _m	#VALUE!	Hours	Extracts the day number from the Billing Period date held in sheet IP cell E5 (last day of the billing month) and multiplies by 24
Total Hours in the Contract Year	PH _n	#N/A	Hours	Looks up the PH _n value from a table held in sheet A-1 based on the Operating Year held in the Input Sheet (IP)
Actual Net Dependable Power Capacity, including ECA 9.3 a)		-	MWh	Value taken from Adjustment and Overrules (ADO) sheet cell E4 which is the sum of the daily DCP from the Linkage sheet (Note to Reviewers of Charge Calculation detail: Please compare Actual Net Dependable Power Capacity against Contracted Power Capacity for the billing month and Net Dependable Power Capacity for the billing month. The value for Actual Net Dependable Power Capacity should not exceed both values. Calculation errors exist if Actual Net Dependable Power Capacity exceeds Contracted Power Capacity for the billing month and Net Dependable Power Capacity for the billing month)
Contracted Power Capacity for the Billing Month		#N/A	MWh	CCP _n * PH _m [D17 * D19]
Net Dependable Power Capacity for the Billing Month		#VALUE!	MWh	DCP * PH _m [D18 * D19]
Net Power Output Actually Unavailable	LCP _{am}	-	MWh	Value taken from Adjustment and Overrules (ADO) sheet cell E5 which is the sum of the daily LCP _{am} from the Daily Performance Report
Total length of Unavailability for Power <i>Informational only</i>	UDP _j	-	Hours	Value taken from Adjustment and Overrules (ADO) sheet cell E10 which is the sum of the daily UDP _j from the Daily Performance Report divided by 60
Net Power Output Projected Unavailable	LCP _{pm}	#N/A	MWh	LCP _{pm} = (LCP _{pn} ^U / 12) + LCP _{pn} ^P
Net Power Output Projected Unavailable (Contract Year, Unplanned Outages)	LCP _{pn} ^U	#N/A	MWh	Looks up the LCP _{pn} ^U value from a table held in sheet A3-1 based on the Operating Year held in the Input Sheet (IP)
Net Power Output Projected Unavailable (Contract Year, Planned Outages)	LCP _{pn} ^P	#N/A	MWh	Looks up the LCP _{pn} ^P value from a table held in sheet A3-1 based on the Operating Year held in the Input Sheet (IP)
Net Power Output Projected (Planned Outages for the Billing Period)	LCP _{pm} ^P		MWh	Value held in sheet SM cell D25
Net Power Output Projected (Sum of LCP _{pm} ^P for this Contract Year)		-	MWh	Value held in sheet SM cell D19
Deduction for Reduced Power Availability				
	DRAP _m	#N/A	\$	Case One (Under Performance) where LCP _{am} > LCP _{pm} DRAP _m = CCRP _m * DFP _m * LCP _{am} * 10
Case One (under performance)	LCP _{am} > LCP _{pm}	#N/A		Value' cell set to 'TRUE' if condition met (used by DRAP _m formula)
Case Two (over performance)	LCP _{am} ≤ LCP _{pm}	#N/A		Value' cell set to 'TRUE' if condition met (used by DRAP _m formula)
				DFP _m = IF LCP _{am} < LCP _{pm} THEN 1 ELSE IF LCP _{am} < LCP _{pm} * 1.1 THEN 1.1 ELSE IF LCP _{am} > LCP _{pm} * 1.1 AND LCP _{am} < LCP _{pm} * 1.25 THEN 1.2 ELSE IF LCP _{am} > LCP _{pm} * 1.25 AND LCP _{am} < LCP _{pm} * 1.5 THEN 1.3 ELSE 1.5
Payment Deduction Factor for Power	DFP _m	#N/A		(Note to Reviewers of Charge Calculation detail: Please verify the accuracy of DFP _m as it affects credit amounts to Saudi Aramco for reduced power availability. Divide LCP _{am} by LCP _{pm} . Compare the value for LCP _{am} /LCP _{pm} to the ranges in Table A-5 (click ? button to go to table) to determine what the value for DFP _m should be. For example, if LCP _{am} /LCP _{pm} = 1.09, then 1.1 would be the value for DFP _m . Calculation errors may exist if the CPP sheet's DFP _m value does not match the DFP _m value from your verification)
Fixed O&M Component of Capacity Payment for Power				
Component BP	BP_m	#VALUE!	\$	BP _m = FOMPP _m - DOMP _m
Base Fixed O&M Payment for Net Dependable Power Capacity	FOMPP _m	#VALUE!	\$	FOMPP _m is calculated below in cell D14
Deduction for Reduced Power Availability (O&M)	DOMP _m	#N/A	\$	DOMP _m is calculated below in cell D55
Base Fixed O&M Payment for Net Dependable Power Capacity				
Fixed O&M Cost Recovery	FOMRP _m	#VALUE!	US Cents/kWh	FOMPP _m = FOMRP _m * DCP * PH _m * 10
Fixed O&M Cost Recovery Charge Rate	FOMRP	0.15799	US Cents/kWh	FOMRP _m = FOMRP * Y _{FOMRP} * (SCIm / SCIt) * (EXR / EXR _m) + FOMRP * (1 - Y _{FOMRP}) * (USPm / USP _r)
Local Proportion of FOMRP	Y _{FOMRP}	6.0%	%	Value held in sheet P cell E27
Reference Exchange Rate	EXR _r	0.26667		Value held in sheet P cell E28
Exchange Rate	EXR _m			Value held in sheet P cell E10
Saudi Consumer Price Index	SCIm	-		Value held in sheet P cell E9
Reference Saudi Consumer Price Index	SCIt	98.60		Value held in sheet P cell E11
US Consumer Price Index	USP _m	-		Value held in sheet P cell E12
Reference US Consumer Price Index	USP _r	153.50		Value held in sheet P cell E13
				Value held in sheet P cell E14
Deduction for Reduced Power Availability (O&M)				
	DOMP _m	#N/A	\$	DOMP _m = IF LCP _{am} > LCP _{pm} THEN FOMRP _m * DFP _m * LCP _{am} * 10 ELSE FOMRP _m * (LCP _{pm} - b * (LCP _{pm} - LCP _{am})) * 10
Case One (under performance)	LCP _{am} > LCP _{pm}	#N/A		Value' cell set to 'TRUE' if condition met (used by DOMP _m formula)
Case Two (over performance)	LCP _{am} ≤ LCP _{pm}	#N/A		Value' cell set to 'TRUE' if condition met (used by DOMP _m formula)

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APPENDIX C –POWER CHARGE REPORTS (con't)

OPP Worksheet –Output Payment for Power

OUTPUT PAYMENT FOR POWER

[BACK to CONTROL Sheet](#)

Description	ECA Definition	Value	Units	Notes
Fuel Adjustment Component				
Component CP	CP_m	0.00	\$? CP _m = (FD _{pm} [#] - FD _{am} [#]) * c * GP _m [* Considering measuring tolerances as determined in accordance with Case A and Case B]
Projected Fuel Demand	FD _{pm}	0	10 ⁶ BTU	? Value held in ADO cell E18
Actual Fuel Demand	FD _{am}	0	10 ⁶ BTU	? Value held in ADO cell E19
Measuring Tolerance Fuel Demand	MTFD	1.00%		? Value held in IP cell E23
Price for Gas	GP _m	0.83	\$/10 ⁶ BTU	? Fixed value of \$0.83 / 10 ⁶ BTU (LHV) as per ECA
Case A (under Performance)				? TRUE w hen FD _{pm} * (1 + MTFD) < FD _{am} * (1 - MTFD)
Case B (over Performance)				? TRUE w hen FD _{pm} * (1 - MTFD) > FD _{am} * (1 + MTFD)
Factor c (c=1 for Case A and c=.50 for Case B)	c	0.50		? Factor c = IF CASE A under performance = TRUE THEN 1 ELSE 0.5
		Projected Fuel Demand FD _{pm} [#]	Actual Fuel Demand FD _{am} [#]	
Correction for Measuring Tolerance Fuel Demand (MTFD)	+MTFD	0.00	0.00	? -MTFD (Case A under performance work cell) Projected Fuel Demand = FD _{pm} * (1 + MTFD) Actual Fuel Demand = FD _{am} * (1 - MTFD)
	-MTFD	0.00	0.00	? -MTFD (Case B over performance work cell) Projected Fuel Demand = FD _{pm} * (1 - MTFD) Actual Fuel Demand = FD _{am} * (1 + MTFD)
Variable O&M Component of Output Payment for Power				
Component DP	DP_m	#VALUE!	\$? DP _m = E _{am} * VOMR _m / 100
Actual Net Power Output	E _{am}	-	kWh	? Value held in sheet ADO cell E8
Actual Net Power Output Metered for the Month (2 pm Reading)		-	kWh	? Value held in sheet ADO cell E9
Variable O&M Cost Recovery Charge for Net Power & Net Steam Output	VOMR _m	#VALUE!	US Cents / kWh	? VOMR _m = VOMR * Y _{VOMR} * (SC _m / SC _{tr}) * (EXR _r / EXR _m) + VOMR * (1 - Y _{VOMR}) * (USP _m / USP _{tr})
Variable O&M Cost Recovery Charge Rate	VOMR	0.09898	US Cents / kWh	? Value held in sheet IP cell E29
Local Proportion of VOMR	Y _{VOMR}	5.0%	%	? Value held in sheet IP cell E30
Reference Exchange Rate	EXR _r	0.26667		? Value held in sheet IP cell E10
Exchange Rate	EXR _m			? Value held in sheet IP cell E9
Saudi Consumer Price Index	SCI _m	-		? Value held in sheet IP cell E11
Reference Saudi Consumer Price Index	SCI _r	98.60		? Value held in sheet IP cell E12
US Consumer Price Index	USPI _m	-		? Value held in sheet IP cell E13
Reference US Consumer Price Index	USPI _r	153.50		? Value held in sheet IP cell E14

Notes are provided on the worksheet to assist in validating data with source schedules.

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APPENDIX C –POWER CHARGE REPORTS (con't)

SUP Worksheet –Start-up Cost Example

START-UP COSTS

[BACK to CONTROL Sheet](#)

Description	ECA Definition	Value	Units	Notes
Start-Up Costs Attributable to Plant Dispatch Actions				
Start-Up Payment	SU_m	0.00	\$?
US Consumer Price Index	USPI _m	170.20		?
Reference US Consumer Price Index	USPI _r	153.50		?
Unit 1				
Number of Scheduled Successful Starts for this Contract Year		2		?
Number of Scheduled Successful Starts this Billing Period		0		?
Number of Chargeable Scheduled Successful Starts this Billing Period		0		?
Unit 2				
Number of Scheduled Successful Starts for this Contract Year		1		?
Number of Scheduled Successful Starts this Billing Period		0		?
Number of Chargeable Scheduled Successful Starts this Billing Period		0		?

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APPENDIX C –POWER CHARGE REPORTS (con't)

Table A-1 –Contracted Power Capacity Example

Table A-1 Contracted Power Capacity

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Contract Year	Contracted Power Capacity CCPn (MW)	Period Hours in Contract Year n	Notes
1	305.0	8760	CCPn selected from this table by the CCPn formula in the CPP sheet
2	299.3	8784	
3	297.6	8760	
4	296.3	8760	
5	295.5	8760	
6	294.8	8784	
7	296.4	8760	
8	295.3	8760	
9	294.6	8760	
10	294.0	8784	
11	293.6	8760	
12	293.2	8760	
13	294.9	8760	
14	293.8	8784	
15	293.2	8760	
16	292.6	8760	
17	292.1	8760	
18	291.8	8784	
19	293.4	8760	
20	292.4	8760	

Table A3-1 – Projected Availability of Net Power Output Example

Table A3-1 Projected Availability of Net Power Output

[BACK to CONTROL Sheet](#)

Contract Year	Period Hours in Contract Year n h	Projected Available NET POWER OUTPUT (AGP _{pn}) MWh	Projected Loss of Net Power Output due to Unavailability (MWh)			Planned Days	Unplanned Days	Notes Planned Days = LCP _{pn} ^P / CCP _n / 24 Unplanned Days = LCP _{pn} ^U / CCP _n / 24
			Planned (LCP _{pn} ^P) MWh	Unplanned (LCP _{pn} ^U) MWh	Total (LCP _{pn}) MWh			
1	8760	2,449,687	65,883	156,363	222,246	9	21.36	
2	8784	2,436,438	64,656	128,234	192,889	9	17.85	
3	8760	2,379,042	128,551	99,127	227,677	18	13.88	
4	8760	2,430,358	64,002	101,265	165,267	9	14.24	
5	8760	2,424,024	63,835	101,001	164,836	9	14.24	
6	8784	2,275,312	219,324	94,805	314,129	31	13.40	
7	8760	2,430,738	64,012	101,281	165,292	9	14.24	
8	8760	2,421,744	63,775	100,906	164,681	9	14.24	
9	8760	2,355,334	127,269	98,139	225,408	18	13.88	
10	8784	2,418,383	63,508	100,766	164,274	9	14.28	
11	8760	2,408,062	63,415	100,336	163,750	9	14.24	
12	8760	2,256,634	218,175	94,026	312,202	31	13.36	
13	8760	2,418,830	63,698	100,785	164,483	9	14.24	
14	8784	2,416,605	63,461	100,692	164,153	9	14.28	
15	8760	2,343,726	126,642	97,655	224,298	18	13.88	
16	8760	2,399,701	63,194	99,988	163,182	9	14.24	
17	8760	2,396,154	63,101	99,840	162,941	9	14.24	
18	8784	2,252,185	217,095	93,841	310,936	31	13.40	
19	8760	2,406,922	63,385	100,288	163,673	9	14.24	
20	8760	2,397,927	63,148	99,914	163,061	9	14.24	

Table A-5 –Payment Deduction Factor for Power Example

Table A-5 Payment Deduction Factor for Power

[BACK to CONTROL Sheet](#)

LCP _{pam} (MWh)	DFF _{pam}	From	To	Notes
Up to LCP _{pam}	1.00	0	#N/A	Values taken from Table A5 - Payment Deduction Factor for Power Initial LCP _{pam} value held in sheet CPP cell D28
> LCP _{pam} through 1.1 LCP _{pam}	1.10	#N/A	#N/A	
> 1.1 LCP _{pam} through 1.25 LCP _{pam}	1.20	#N/A	#N/A	
> 1.25 LCP _{pam} through 1.5 LCP _{pam}	1.30	#N/A	#N/A	
> 1.5 LCP _{pam}	1.50	#N/A	#N/A	
LCP _{pam}	-			

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APPENDIX D –STEAM CHARGE REPORTS

CPS Worksheet –Capacity Payment for Steam Example

CAPACITY PAYMENT FOR STEAM

[BACK to CONTROL Sheet](#)

Description	ECA Definition	Value	Units	Notes
Fixed Capital Component of Steam Capacity Payment				
Component AS				
Base Capital Payment for Steam	AS_m	#VALUE!	\$	$AS_m = FCPS_m - DRAS_m$
Deduction for Reduced Steam Availability	$FCPS_m$	#VALUE!	\$	Value held in cell D9
	$DRAS_m$	#N/A	\$	Value held in cell D34
Base Capital Payment for Steam				
Capital Cost Recovery Charge Rate for Net Dependable Steam	$FCPS_m$	#VALUE!	\$	$FCPS_m = CCRS_m \cdot DCS \cdot PH_m$
Capital Cost Recovery Charge Rate	$CCRS_m$	#VALUE!	\$ / 1,000 lb	$CCRS_m = (CCRS \cdot Y_{CCRS} \cdot EXR / EXR_m) + (CCRS \cdot (1 - Y_{CCRS}))$
Local Portion of CCRS	$CCRS$	0.56039	\$ / 1,000 lb	Value held in sheet IP cell E31
Reference Exchange Rate	Y_{CCRS}	0.0%	%	Value held in sheet IP cell E32
Exchange Rate	EXR_e	0.26667		Value held in sheet IP cell E10
	EXR_m			Value held in sheet IP cell E9
Projected Available Net Steam Output (Contract Year) <i>Informational only</i>	AGS_{pn}	#N/A	1,000 lb	$AGS_{pn} = PH_m \cdot CCRS_m - (LCS_{pn}^U + LCS_{pn}^P)$
Contracted Steam Capacity	CCS_n	#N/A	1,000 lb/hr	Looks up the CCRS value from a table held in sheet B-1 based on the Operating Year held in the Input Sheet (IP)
Net Dependable Steam Capacity (Latest Tested, at Reference Site Conditions)	DCS	-	1,000 lb/hr	Value held in sheet ADO cell E13
Total Hours in the Billing Period	PH_m	#VALUE!	Hours	Extracts the day number from the Billing Period date held in sheet IP cell E5 (last day of the billing month) and multiplies by 24
Total Hours in the Contract Year	PH_n	#N/A	Hours	Looks up the PH value from a table held in sheet B-1 based on the Operating Year held in the Input Sheet (IP)
Actual Net Dependable Steam Capacity, including ECA 9.3 a)		-	1,000 lb/hr	Value held in sheet ADO cell E11 (Note to Reviewers of Charge Calculation detail: Please compare Actual Net Dependable Steam Capacity against Contracted Steam Capacity for the billing month and Net Dependable Steam Capacity for the billing month. The value for Actual Net Dependable Steam Capacity should not exceed both values. Calculation errors exist if Actual Net Dependable Steam Capacity exceeds Contracted Steam Capacity for the billing month and Net Dependable Steam Capacity for the billing month)
Contracted Steam Capacity for the Billing Month		#N/A	1,000 lb/hr	$CCS_n \cdot PH_m [D17 \cdot D19]$
Net Dependable Steam Capacity for the Billing Month		#VALUE!	1,000 lb/hr	$DCS \cdot PH_m [D18 \cdot D19]$
Net Steam Output Actually Unavailable	LCS_{am}	-	1,000 lb/hr	Value held in sheet ADO cell E12
Total length of Unavailability for Steam, <i>Informational only</i>	UDS_j	-	Hours	Value held in sheet ADO cell E17
Net Steam Output Projected Unavailable	LCS_{pn}	#N/A	1,000 lb	$LCS_{pn} = (LCS_{pn}^U / 12) + LCS_{pn}^P$
Net Steam Output Projected Unavailable (Contract Year, Unplanned Outages)	LCS_{pn}^U	#N/A	1,000 lb	Looks up the LCS_{pn}^U value from a table held in sheet B3-1 based on the Operating Year held in the Input Sheet (IP)
Net Steam Output Projected Unavailable (Contract Year, Planned Outages)	LCS_{pn}^P	#N/A	1,000 lb	Looks up the LCS_{pn}^P value from a table held in sheet B3-1 based on the Operating Year held in the Input Sheet (IP)
Net Steam Output Projected (Planned Outages for the Billing Period)	LCS_{pn}^P		1,000 lb	Value held in sheet SM cell H25
Net Steam Output Projected (Sum of LCS_{pn}^P for this Contract Year)		-	1,000 lb	Value held in sheet SM cell H19
Deduction for Reduced Steam Availability				
	$DRAS_m$	#N/A	\$	Case One (Under Performance) where $LCS_{am} > LCS_{pn}$ $DRAS_m = CCRS_m \cdot DFS_m \cdot LCS_{am}$
Case One (under performance)	$LCS_{am} > LCS_{pn}$	#N/A		Value cell set to 'TRUE' if condition met (used by $DRAS_m$ formula)
Case Two (over performance)	$LCS_{am} \leq LCS_{pn}$	#N/A		Value cell set to 'TRUE' if condition met (used by $DRAS_m$ formula)
Payment Deduction Factor for Steam	DFS_m	#N/A		$DFS_m =$ IF $LCS_{am} \leq LCS_{pn}$ THEN 1 ELSE IF $LCS_{am} \leq LCS_{pn} \cdot 1.1$ THEN 1.1 ELSE IF $LCS_{am} > LCS_{pn} \cdot 1.1$ AND $LCS_{am} \leq LCS_{pn} \cdot 1.25$ THEN 1.2 ELSE IF $LCS_{am} > LCS_{pn} \cdot 1.25$ AND $LCS_{am} \leq LCS_{pn} \cdot 1.5$ THEN 1.3 ELSE 1.5 (Note to Reviewers of Charge Calculation detail: Please verify the accuracy of DFS_m as it affects credit amounts to Saudi Aramco for reduced steam availability. Divide LCS_{am} by LCS_{pn} . Compare the value for LCS_{am}/LCS_{pn} to the ranges in Table B-5 (click ? button to go to table) to determine what the value for DFS_m should be. For example, if $LCS_{am}/LCS_{pn} = 1.42$, then 1.3 would be the value for DFS_m . Calculation errors may exist if the CPS sheet's DFS_m value does not match the DFS_m value from your verification)
Fixed O&M Component of Capacity Payment for Steam				
Component BS				
Base Fixed O&M Payment for Net Dependable Steam Capacity	BS_m	#VALUE!	\$	$BS_m = FOMPS_m - DOMS_m$
Deduction for Reduced Steam Availability (O&M)	$FOMPS_m$	#VALUE!	\$	Value held in cell D44
	$DOMS_m$	#N/A	\$	Value held in cell D65
Base Fixed O&M Payment for Net Dependable Steam Capacity				
Fixed O&M Cost Recovery	$FOMPS_m$	#VALUE!	\$	$FOMPS_m = FOMRS_m \cdot DCS \cdot PH_m$
Fixed O&M Cost Recovery Charge Rate	$FOMRS_m$	#VALUE!	\$ / 1,000 lb	$FOMRS_m = FOMRS \cdot Y_{FOMRS} \cdot (SC_m / SC_r) \cdot (EXR / EXR_m) + FOMRS \cdot (1 - Y_{FOMRS}) \cdot (USP_m / USP_r)$
Local Portion of FOMRS	$FOMRS$	0.15754	\$ / 1,000 lb	Value held in sheet IP cell E33
Reference Exchange Rate	Y_{FOMRS}	22.0%	%	Value held in sheet IP cell E34
Exchange Rate	EXR_e	0.26667		Value held in sheet IP cell E10
	EXR_m			Value held in sheet IP cell E9
Saudi Consumer Price Index	SCI_m	-		Value held in sheet IP cell E11
Reference Saudi Consumer Price Index	SCI_r	98.60		Value held in sheet IP cell E12
US Consumer Price Index	USP_m	-		Value held in sheet IP cell E13
Reference US Consumer Price Index	USP_r	153.50		Value held in sheet IP cell E14
Deduction for Reduced Steam Availability (O&M)				
	$DOMS_m$	#N/A	\$	$DOMS_m =$ IF $LCS_{am} > LCS_{pn}$ THEN $FOMRS_m \cdot DFS_m \cdot LCS_{am}$ ELSE $FOMRS_m \cdot (LCS_{pn} - b) \cdot (LCS_{pn} - LCS_{am})$
Case One (under performance)	$LCS_{am} > LCS_{pn}$	#N/A		Value cell set to 'TRUE' if condition met (used by $DOMS_m$ formula)
Case Two (over performance)	$LCS_{am} \leq LCS_{pn}$	#N/A		Value cell set to 'TRUE' if condition met (used by $DOMS_m$ formula)

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FAC Worksheet –Feedwater Adjustment Example

FEEDWATER ADJUSTMENT[BACK to CONTROL Sheet](#)

Description	ECA Definition	Value	Units	Notes
Feedwater Adjustment Component				
Component CS	CS_m	0.00	\$? CS _m = (FWD _{am} - (S _{am} * (1 + d))) * FWP
Actual Feedwater Demand	FWD _{am}	549,726	1,000 lb	? Value held in sheet ADO cell E20
Actual Net Steam Output	S _{am}	562,136	1,000 lb	? Value held in sheet ADO cell E15
Actual Net Steam Output Metered for the Month (2 pm Reading)		0	1,000 lb	? Value held in sheet ADO cell E16
Price for excess Feedwater Demand	FWP	2.00	\$ / 1,000 lb	? Fixed value of \$2.00 per 1,000 lb as per the ECA
Feedwater Demand Applicable				? TRUE IF FWD _{am} > (1 + 0.05) * S _{am}

Feedwater adjustments are expected to be zero due to the 5% feedwater demand and Steam output volume tolerance limit provided in ECA Appendix K.

Notes are provided on the worksheet to assist in validating data with source schedules.

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APPENDIX E –SUMMARY OF CHARGES

Summary Adjustment Example

SUMMARY		Period :- May-2007			BACK to CONTROL Sheet	
	Description	ECA Definition	Value	Units	Notes	
Capacity Payment for Power			1,300,101.96	\$?	APm + BPm
	Fixed Capital Component	AP _m	1,041,676.29	\$?	Value held in sheet CPP cell D5
	Fixed O&M Component	BP _m	258,425.66	\$?	Value held in sheet CPP cell D40
Output Payment for Power			149,643.32	\$?	CPm + DPm
	Fuel Adjustment Payment	CP _m	8,882.16	\$?	Value held in sheet OPP cell D5
	Variable O&M Component	DP _m	140,761.17	\$?	Value held in sheet OPP cell D18
Capacity Payment for Steam			434,785.53	\$?	ASm + BSm
	Fixed Capital Component	AS _m	332,277.96	\$?	Value held in sheet CPS cell D5
	Fixed O&M Component	BS _m	102,507.56	\$?	Value held in sheet CPS cell D40
	Feedwater Adjustment Payment for Steam	CS _m	0.00	\$?	Value held in sheet FAC cell D5
	Start-Up Payments	SU _m	0.00	\$?	Value held in sheet SUP cell D5
	Auxiliary Power Payment		-360.74	\$		Auxiliary Power metered for the month * Auxiliary Power Payment Tariff (Note - Volume held in sheet ADO cell E21 and Tariff held in sheet IP cell E19)
	Non-conforming Gas & Feedwater Payment		0.00	\$		Payment to be Agreed TPGC/SA
	Ancillary Services (Potable & Utility Water)		-827.76	\$?	$((\text{Ancillary Services - Potable water} / 1000 * 10) + (\text{Ancillary Services - Utility water} / 1000 * 0.5)) * -1$
TOTAL PAYMENT			1,883,342.30	\$		APm + BPm + CPm + DPm + ASm + BSm + CSm + SUm + Auxiliary Power Payment + Non-conforming Gas & Feedwater Payment + Ancillary Services (Potable & Utility Water)

Notes are provided on the worksheet to assist in validating data with source schedules.

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26 of 28**APPENDIX F –CODING INSTRUCTIONS HISTORY**

The following cost center and account coding instructions were in effect through December 31, 2009 and reflect Power charges posted to PDD cost centers.

Cogen Plant	Cost Center	Account No.	Account Description
<u>Power Charges</u>			
Uthmaniyah	494552	7408201	Capital Leases – Power Only
Shedgum	494553	7408201	Capital Leases – Power Only
Ras Tanura	494554	7408201	Capital Leases – Power Only
Juaymah	214842	7408201	Capital Leases – Power Only
<u>Steam Charges</u>			
Uthmaniyah	213502	7408200	Capital Leases – Excludes Power
Shedgum	212502	7408200	Capital Leases – Excludes Power
Ras Tanura	381570	7408200	Capital Leases – Excludes Power
Juaymah	214844	7408200	Capital Leases – Excludes Power

Effective January 1, 2010, Power charges are coded to end user plants in support of the First Spent Money initiative.

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APPENDIX G – POWER INVOICE REVIEW CHECKLIST

Saudi Aramco Tihama Invoice Review Checklist Power Services		Host Plant:	Month / Year:	Prepared by:	Reviewed by:
Worksheet Ref.	GI Ref.	Review Procedures		Complete (✓)	
I. Data Upload and Verification					
	9.1	Verify import process completed without errors		<input type="checkbox"/>	
	9.2	Site, billing month and COD correct on Control Worksheet		<input type="checkbox"/>	
	9.3	CCR reports agree to PI CCR reports		<input type="checkbox"/>	
II. Power & Steam Shared Data Elements					
ADO Schedule	10.1	Agree amounts to the <u>approved</u> Linkage worksheet		<input type="checkbox"/>	
IP Schedule	10.2	a) Review Location, Billing Period, Invoice Date and Operating Year		<input type="checkbox"/>	
		b) Items 1 - 2, Verify Riyal/USD exchange rate = \$0.26667		<input type="checkbox"/>	
		c) Items 3 - 6, Verify price indices. If updated, validate per TPGC Agreed Procedure #10 - Monthly Billing.		<input type="checkbox"/>	
		d) Items 7 - 8A, Vouch Start Values to the <u>approved</u> Linkage worksheet		<input type="checkbox"/>	
		e) Items 9 - 13, review for reasonableness		<input type="checkbox"/>	
		f) Items 14 - 23, agree to prior month, ECA contract schedule or as agreed		<input type="checkbox"/>	
SM Schedule	10.3	a) Agree Planned Availability Values, LCP ^{pm} and LCS ^{pm} , to the current year Scheduled Maintenance program		<input type="checkbox"/>	
		b) Review LCP ^{pm} and LCS ^{pm} values and agree to Tables A3-1 and B3-1. Verify tables have not changed.		<input type="checkbox"/>	
		b) Verify "Values Used for Billing Month" do not exceed LCP ^{pm} and LCS ^{pm} values.		<input type="checkbox"/>	
ER Schedule	10.4	Verify Riyal/USD exchange rate = \$0.26667		<input type="checkbox"/>	
Setup Schedule	10.5	Verify "Transfer to Reserve" values reflect "No" for years 1 - 18 and "Yes" for years 19 - 20.		<input type="checkbox"/>	
III. Power Charges					
CPP Schedule	11.1	a) Review Fixed Capital and Fixed O&M calculations for reasonableness		<input type="checkbox"/>	
		b) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		c) Validate "Deduction for Reduced Power Availability"		<input type="checkbox"/>	
		d) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
OPP Schedule	11.2	a) Review Fuel Adjustment Component and Variable O&M calculation for completeness and accuracy.		<input type="checkbox"/>	
		b) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		c) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
SUP Schedule	11.3	a) Review payment calculation for accuracy and completeness		<input type="checkbox"/>	
		b) Validate methodology as per notes.		<input type="checkbox"/>	
		c) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		d) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
Tables A-1, A3-1 & A-5		Review for reasonableness and on not less than an annual basis agree to applicable schedule.		<input type="checkbox"/>	
IV. Invoice Coding and Approvals					
Summary Schedule	13.1	a) Review subtotal and totals for accuracy and completeness		<input type="checkbox"/>	
		b) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		c) Review Ancillary Service Fees for reasonableness. Investigate any material or unusual amounts.		<input type="checkbox"/>	
		d) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
		e) Ensure Power /Steam pro forma invoices agree to Summary Schedule		<input type="checkbox"/>	
		f) Ensure the Transfer Reserve Deduction = \$0 for all years except contract years 19 & 20 <u>on pro forma invoice</u> .		<input type="checkbox"/>	
Invoice Coding	13.2	a) Verify coding agrees with current directives.		<input type="checkbox"/>	
		b) Auxiliary Power and Ancillary Services coded to A/C 7408200.		<input type="checkbox"/>	
		c) If applicable, Transfer Reserve Deduction coded to A/C 3003038.		<input type="checkbox"/>	
Service Entry Sheet	13.3	Ensure Service Entry Sheets (SES) are received and processed timely		<input type="checkbox"/>	
Partial Month Invoices	13.4	If partial month invoice, perform detailed review of all calculations, consider expanding review to other functions/departments.		<input type="checkbox"/>	
Special Handling	13.5	Review GI 287.002-1 if <u>Prior Period Adjustments</u> , <u>Late Payment Fees</u> , or <u>Disputed Charges</u> are included on the monthly invoice.		<input type="checkbox"/>	

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APPENDIX H – STEAM INVOICE REVIEW CHECKLIST

Saudi Aramco Tihama Invoice Review Checklist Steam Services		Host Plant:	Month / Year:	Prepared by:	Reviewed by:
Worksheet Ref.	GI Ref.	Review Procedures		Complete (✓)	
I. Data Upload and Verification					
	9.1	Verify import process completed without errors		<input type="checkbox"/>	
	9.2	Site, billing month and COD correct on Control Worksheet		<input type="checkbox"/>	
	9.3	CCR reports agree to PI CCR reports		<input type="checkbox"/>	
II. Power & Steam Shared Data Elements					
ADO Schedule	10.1	Agree amounts to the <u>approved</u> Linkage worksheet		<input type="checkbox"/>	
IP Schedule	10.2	a) Review Location, Billing Period, Invoice Date and Operating Year		<input type="checkbox"/>	
		b) Items 1 - 2, Verify Riyal/USD exchange rate = \$0.26667		<input type="checkbox"/>	
		c) Items 3 - 6, Verify price indices. If updated, validate per TPGC Agreed Procedure #10 - Monthly Billing.		<input type="checkbox"/>	
		d) Items 7 - 8A, Vouch Start Values to the <u>approved</u> Linkage worksheet		<input type="checkbox"/>	
		e) Items 9 - 13, review for reasonableness		<input type="checkbox"/>	
		f) Items 14 - 23, agree to prior month, ECA contract schedule or as agreed		<input type="checkbox"/>	
SM Schedule	10.3	a) Agree Planned Availability Values, LCPpm ^P and LCSpm ^P , to the current year Scheduled Maintenance program		<input type="checkbox"/>	
		b) Review LCPpm ^P and LCSpm ^P values and agree to Tables A3-1 and B3-1. Verify tables have not changed.		<input type="checkbox"/>	
		b) Verify "Values Used for Billing Month" do not exceed LCPpmP and LCSpmP values.		<input type="checkbox"/>	
ER Schedule	10.4	Verify Riyal/USD exchange rate = \$0.26667		<input type="checkbox"/>	
Setup Schedule	10.5	Verify "Transfer to Reserve" values reflect "No" for years 1 - 18 and "Yes" for years 19 - 20.		<input type="checkbox"/>	
III. Steam Charges					
CPC Schedule	12.1	a) Review Fixed Capital and Fixed O&M calculations for reasonableness		<input type="checkbox"/>	
		b) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		c) Validate "Deduction for Reduced Steam Availability"		<input type="checkbox"/>	
		d) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
FAC Schedule	12.2	a) Review Feedwater calculation for accuracy and completeness		<input type="checkbox"/>	
		b) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		d) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
Tables B-1, B3-1 & B-5	12.3	Review for reasonableness and on not less than an annual basis agree to applicable schedule.		<input type="checkbox"/>	
IV. Invoice Coding and Approvals					
Summary Schedule	13.1	a) Review subtotal and totals for accuracy and completeness		<input type="checkbox"/>	
		b) Agree amounts to supporting schedules as per Notes.		<input type="checkbox"/>	
		c) Review Ancillary Service Fees for reasonableness. Investigate any material or unusual amounts.		<input type="checkbox"/>	
		d) Compare CCR reports to PI CCR reports.		<input type="checkbox"/>	
		e) Ensure Power /Steam pro forma invoices agree to Summary Schedule		<input type="checkbox"/>	
		f) Ensure the Transfer Reserve Deduction = \$0 for all years except contract years 19 & 20 on <u>pro forma invoice</u> .		<input type="checkbox"/>	
Invoice Coding	13.2	a) Verify coding agrees with current directives.		<input type="checkbox"/>	
		b) Auxiliary Power and Ancillary Services coded to A/C 7408200.		<input type="checkbox"/>	
		c) If applicable, Transfer Reserve Deduction coded to A/C 3003038.		<input type="checkbox"/>	
Service Entry Sheet	13.3	Ensure Service Entry Sheets (SES) are received and processed timely		<input type="checkbox"/>	
Partial Month Invoices	13.4	If partial month invoice, perform detailed review of all calculations, consider expanding review to other functions/departments.		<input type="checkbox"/>	
Special Handling	13.5	Review GI 287.002-1 if <u>Prior Period Adjustments, Late Payment Fees, or Disputed Charges</u> are included on the monthly invoice.		<input type="checkbox"/>	

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CONTENTS This instruction provides guidance for handling prior period adjustments, late payment fees and disputed charges arising from Tihama Power's Cogeneration services.

1. Glossary
 2. Background & Purpose
 3. Scope
 4. Company Policies & Other Publications
 5. Responsibilities
 6. Prior Period Adjustments
 7. Late Payment Fees
 8. Disputed Payments
- Appendix A – Prior Period Adjustment Summary Schedule
 Appendix B – Late Payments
 Appendix C – Payment Validation
 Appendix D – Escrow Accounts

1. GLOSSARY**1.1. Abbreviations & Acronyms:**

AI	Accounting Instruction
BOOT	Build, Own, Operate & Transfer
CCR	Charge Calculation Reports
COD	Commercial Operation Date
COGEN	Cogeneration Plants built and operated by Tihama Power
ECA	Energy Conversion Agreement
ESV	Entry Sheet Verification
GI	General Instruction
PDD	Power Distribution Department
PI	Tihama Power Plant Information System
SES	Service Entry Sheet
SSFDM	Settlement System & Fuel Demand Application
TPGC	Tihama Power Generation Company Ltd.

1.2. Definitions of Words and Phrases:

Host Plant – Uthmaniyah Gas Plant, Shedgum Gas Plant, and Juaymah NGL Fractionation, or Ras Tanura Refinery

Cogen Plant – Uthmaniyah, Shedgum, Juaymah , or Ras Tanura Cogen Plants

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RAKPAGE NO.
2 of 13**2. BACKGROUND & PURPOSE**

Saudi Aramco and TPGC executed four (4) long-term ECAs in December 2003 whereby TPGC would construct and operate gas turbine Power and Steam Cogen Plants at the Company's Host Plants.

The ECAs incorporate a BOOT (build, own, operate and transfer) model spanning 20 years. As specified in the agreements, TPGC will issue individual monthly invoices for Power and Steam services for each location. The total ECA value is estimated to exceed \$2.4 billion.

This instruction identifies key controls associated with processing non-standard TPGC charges identified below. Due to the complexity of the Cogen billing process, specific guidelines are provided to ensure appropriate review procedures are performed.

- Prior Period Adjustments
- Late Payment Fees
- Disputed Payments

This instruction supplements GI 287.002, Tihama Power Invoice Verification and Monthly Accrual Process.

3. SCOPE

- 3.1. Processing prior period adjustments arising from routine publication delays of annual economic data elements including the Saudi Consumer Price Index and US Producer Price Index as provided in Settlement System Agreed Procedure #10, Monthly Billing.
- 3.2. Reviewing late payment fees assessed by TPGC.
- 3.3. Managing payment disputes and related escrow accounts.

4. COMPANY POLICIES & OTHER PUBLICATIONS

- 4.1. References to Company Policies:

GI 287.002, *Tihama Power Invoice Verification and Monthly Accrual Process*
AI 707, *Payments to Contractors and Vendors*

- 4.2. References to Other Publications and Documents:

- *Energy Conversion Agreements* dated December 20, 2003

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- *Tihama Power Generation Co. Ltd, Settlement System Agreed Procedures*
- Power Distribution Department White Paper: *Administration & Management of 3rd Party Cogeneration Plants (UGP, SGP, JNGLF, RTR)*, dated: February 13, 2006

5. RESPONSIBILITIES

For the avoidance of doubt, the following summarizes the responsibilities indentified in the above referenced publications and incorporated herein.

- 5.1. PDD is the overall Contract Administrator for the ECAs and is the main Proponent for TPGC.
- 5.2. PDD is the Proponent to verify Power-related invoices.
- 5.3. Host Plants are the Proponents for Steam-related invoices, payments and adjustments and ensuring timely processing and payment of Power-related invoices.

6. PRIOR PERIOD ADJUSTMENTS

Several economic data elements are incorporated in the Cogen billing process including the Saudi Consumer Price Index and US Producer Price Index. Indices are adjusted annually based upon plant Commercial Operation Dates (COD) outlined below.

Cogen Plant	Commercial Operations Date
Uthmaniyah	March
Shedgum	June
Ras Tanura	September
Juaymah	December

Due to publication delays, annual updates may be delayed for several months necessitating modification of previously issued invoices. This situation was contemplated when negotiating the original agreements and is addressed in TPGC Settlement System, Agreed Procedure #10 – Monthly Billing. The Monthly Billing procedure includes detailed guidelines for validating revised economic indices along with managing the invoice revision process. Retain documentation of the review process for reference and audit purposes. See GI 287.002, Section 13.2 for coding instructions.

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The following key controls have been identified with this activity:

- 6.1. Invoices will not be revised until all updates are received, validated and agreed by PDD and TPGC.
- 6.2. Revised indices should be validated in accordance with procedures included in TPGC Settlement System, Agreed Procedure #10, Appendix A, Obtaining Index Values for SCI_M and USPI_M. It is recommended that copies of indices be retained for future reference.
- 6.3. TPGC is required to provide updated text upload files, PI CCR reports, invoices and SES documents reflecting the revised indices as outlined in Agreed Procedure #10.
- 6.4. TPGC is required to provide a summary of the revised monthly invoices identifying the net amount due to/from Saudi Aramco. See TPGC Settlement System, Agreed Procedure #10, Appendix B, Prior Period Adjustments, for additional instructions. See Appendix A for a sample of the prior period adjustment summary schedule.
- 6.5. New monthly SSFDM application files must be created with the revised text upload files and verified in accordance with GI 287.002, Tihama Power Invoice Verification and Monthly Accrual Process. Caution should be exercised to ensure original SSFDM application files and related CCR reports are retained and available for reference and audit purposes.
- 6.6. Verify the accuracy of the prior period adjustment summary schedule. Agree revised and original invoice amounts presented on the adjustment summary to approved CCR reports.
- 6.7. Review and approve required SES documents to ensure timely payment to TPGC. The ESV process in SAP is used to approve SES documents.

7. LATE PAYMENT FEES

TPGC Settlement System, Agreed Procedure #10, Monthly Billing, defines late payment procedures to include Saudi Aramco and TPGC responsibilities with respect to handling late payment claims. Late payment claims are made on an annual basis with Power and Steam charges segregated by location and type.

TPGC is required to provide documents supporting the late payment claims to include invoice copies, SES forms, payment advice copies and TPGC bank statements.

The following key controls have been identified with this activity:

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- 7.1. Validate data presented on the TPGC late payment summary sheet. Detailed review procedures are provided in Appendix B. Retain documentation of the review process for reference and audit purposes.
- 7.2. Late payment fees shall be charged to cost element 7409709, 3rd Party Pmts (non-Capex) – Claims, Cost Reim, & Other.
- 7.3. Review and approve required SES documents to ensure timely payment to TPGC.

8. DISPUTED PAYMENTS

In the unlikely event Saudi Aramco and TPGC are unable to resolve a payment issue ECA Section 10.2 outlines the process for managing disputes. Key elements of the process include:

- No previously undisputed invoice or payment may be disputed more than one hundred and eighty (180) Days after the due date, and
- Any disputed payment amount pursuant to the agreement shall be paid into the Escrow Account

Cogen Plant specific escrow accounts have been established at the Samba Financial Group's London Branch. See Appendix D for account details.

PDD, as the contract administrator, shall ensure all required coordination activities with Host Plants, Legal, Treasury, and Finance groups occur in the event a payment dispute develops.

Escrow account payments will require coordination with Treasury and Finance to ensure amounts are correctly recorded in the system. A payment dispute does not release Saudi Aramco from the liabilities arising as a result of services previously rendered by TPGC. Accordingly, consideration should be given to the need to establish a non-standard accrual for unrecorded and outstanding amounts due TPGC.

Approved: Original Approved by R. A. KRYGSMAN
R. A. KRYGSMAN, Manager
Accounting Policies & Systems
Department

JAK
W/C #T893

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APPENDIX A – PRIOR PERIOD ADJUSTMENT SUMMARY SCHEDULE

The following prior period adjustment summary is prepared by TPGC and submitted to Saudi Aramco for review and processing. Amounts presented on the summary must be agreed to approved CCR reports. See Settlement System Agreed Procedure #10, Monthly Billing, for instructions on obtaining indices and prior period adjustment invoices.

Ju'aymah Cogen Plant							
Contract Year 1 (December 2006 - May 2007)							
Prior Period Adjustments for Power & Steam							
Power Invoice Only							
Billing Month	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	
Revised Values							Total Revised Values
Capacity Payment for Power	\$ 469,074.40	\$ 1,860,890.47	\$ 1,709,195.17	\$ 1,823,587.76	\$ 1,686,728.26	\$ 1,842,350.67	\$ 9,391,826.73
Less Transfer Reserve Deduction							\$ -
Output Payment for Power	\$ 100,262.12	\$ 301,655.60	\$ 281,095.33	\$ 290,052.97	\$ 240,679.78	\$ 228,471.09	\$ 1,442,216.89
Start-up Payment							\$ -
Auxiliary Power Payment	\$ (482.76)						\$ (482.76)
Non-conforming Gas & Feedwater Payment							\$ -
Totals	\$ 568,853.76	\$ 2,162,546.07	\$ 1,990,290.50	\$ 2,113,640.73	\$ 1,927,408.04	\$ 2,070,821.76	\$ 10,833,560.86
Original Invoice #s & Values	1110048	1110054	1110058	1110071	1110080	1110088	Total Original Values
Capacity Payment for Power	\$ 457,319.33	\$ 1,814,256.33	\$ 1,666,362.53	\$ 1,777,888.43	\$ 1,644,458.64	\$ 1,796,181.14	\$ 9,156,466.40
Less Transfer Reserve Deduction							\$ -
Output Payment for Power	\$ 95,265.62	\$ 286,021.13	\$ 267,235.24	\$ 276,080.62	\$ 227,751.16	\$ 215,343.72	\$ 1,367,697.49
Start-up Payment							\$ -
Auxiliary Power Payment	\$ (468.83)						\$ (468.83)
Non-conforming Gas & Feedwater Payment							\$ -
Totals	\$ 552,116.12	\$ 2,100,277.46	\$ 1,933,597.77	\$ 2,053,969.05	\$ 1,872,209.80	\$ 2,011,524.86	\$ 10,523,695.06
Net Amount Due Tihama Power (Due Saudi Aramco)	\$ 16,737.64	\$ 62,268.61	\$ 56,692.73	\$ 59,671.68	\$ 55,198.24	\$ 59,296.90	\$ 309,865.80
Steam Invoice Only							
Billing Month	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	
Revised Values							Total Revised Values
Capacity Payment for Steam	\$ 166,681.16	\$ 661,257.47	\$ 607,353.97	\$ 655,439.78	\$ 599,362.96	\$ 654,745.48	\$ 3,344,840.82
Less Transfer Reserve Deduction							\$ -
Feedwater Adjustment Payment for Steam							\$ -
Ancillary Services (potable & utility water)	\$ (29.83)	\$ (86.26)	\$ (84.59)	\$ (1,109.88)	\$ (95.45)	\$ (99.02)	\$ (1,505.03)
Totals	\$ 166,651.33	\$ 661,171.21	\$ 607,269.38	\$ 654,329.90	\$ 599,267.51	\$ 654,646.46	\$ 3,343,335.79
Original Invoice #s & Values	1110049	1110055	1110057	1110068	1110078	1110089	Total Original Values
Capacity Payment for Steam	\$ 161,811.14	\$ 641,937.15	\$ 589,608.58	\$ 636,289.44	\$ 581,851.05	\$ 635,615.43	\$ 3,247,112.79
Less Transfer Reserve Deduction							\$ -
Feedwater Adjustment Payment for Steam							\$ -
Ancillary Services (potable & utility water)				\$ (1,109.88)	\$ (95.56)	\$ (99.02)	\$ (1,304.46)
Totals	\$ 161,811.14	\$ 641,937.15	\$ 589,608.58	\$ 635,179.56	\$ 581,755.49	\$ 635,516.41	\$ 3,245,808.33
Net Amount Due Tihama Power (Due Saudi Aramco)	\$ 4,840.19	\$ 19,234.06	\$ 17,660.80	\$ 19,150.34	\$ 17,512.02	\$ 19,130.05	\$ 97,527.46

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APPENDIX B –LATE PAYMENTS

Tihama Power Generation Company Limited												
Calculation of late receipts from Saudi Aramco (C-ARA01) Period ended 31 December 08 Ccy: USD On the basis of Invoice Submitting Date to MS&PAD												
Invoice Number	Invoice Submission Date to MS&PAD	Plant	Power or Steam	Billing Period/Month End	Invoice Value	Due Date (30 days after invoice submission date)	Receipt Date in Bank	# Days Paid Late	BBA Rates (6 months)	Late Payment Interest Rate BBA Rates (6 months) + 2%	Late Payment Fees Due	
1110024	17-Oct-06	RTR	Power	30-Sep-06	\$ 1,316,580.44	16-Nov-06	21-Nov-06	5	5.39000	7.39000	\$ 1,351.32	
1110038	17-Dec-06	RTR	Power	30-Nov-06	\$ 1,313,575.66	16-Jan-07	18-Jan-07	2	5.39688	7.38688	\$ 539.07	
1110070	16-Apr-07	RTR	Power	31-Mar-07	\$ 1,366,514.07	16-May-07	25-May-07	9	5.35000	7.36000	\$ 2,514.39	
1110223	11-Nov-08	RTR	Power	31-Oct-08	\$ 1,385,511.84	11-Dec-08	16-Dec-08	5	2.32250	4.32250	\$ 831.79	
1110232	17-Dec-08	RTR	Power	30-Nov-08	\$ 1,347,910.47	16-Jan-09	26-Jan-09	10	1.58875	3.58875	\$ 1,343.70	
RTR/(Power) Total											\$ 6,580.26	

A	B	C	D	E	F	G = B + 30	H	I = H - G	J	K = J + 2	L = F x (K / 100) x (1 / 360)
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Picture examples are based upon invoice # 1110024.

Verify accuracy of Sum formula. Total should be sum of all cells in blue box.

Review procedures:

- Verify line items presented on the late payment schedule were not included on a previous late payment claim and represent invoices occurring within the period under review.
- Use SAP t-code ZF0778, FI / MM Invoice Report, to verify data items A - F and H. Instructions for validating data in SAP are provided below.
- Verify LIBOR rates utilized in the late payment claim based on procedures included in TPGC Settlement System, Agreed Procedure #10, Appendix C.
- Review formulas for items G, I, K, L and the total line.

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Access the FI/MM Invoice Report screen using t-code ZF0778. The following screen will appear.

The screenshot displays the SAP FI/MM Invoice Report screen. The top menu bar includes Program, Edit, Goto, System, and Help. The title bar shows the SAP logo. The main screen is divided into several sections:

- Vendor selection:** Company Code (1000) and Vendor Number (10029734). Annotations indicate that 1000 is the Saudi Aramco parent company and that the vendor number 10029734 is for Tihama Power.
- Invoice selection:** Outline Agreement (6600010501) and Transaction Currency Key. An annotation explains that 6600010501 is for RTR Cogen, 6600010502 for SGP Cogen, 6600010503 for UGP Cogen, and 6600010504 for JGP Cogen.
- Document Status Selection:** Radio buttons for Parked, Open, Cleared, and All. The 'All' button is selected, with an annotation pointing to it.
- Line Item Selection:** Payment Block.

The bottom status bar shows 'PRC (1) (222)' and 'kuka INS'.

Executing the FI / MM Invoice Report will produce a plant-level report to support the review of TPGC's late payment schedule as outlined above.

If the Outline Agreement field is left blank, a vendor level report containing all TPGC contracts will be generated.

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Invoice Report:

The screenshot shows the SAP FI/MM Invoice Report interface. The title bar indicates 'FI / MM Invoice Report'. The status bar shows 'ZFR01110 222 (PRC)' and 'Run by : STEFFESA'. The main table has columns: Outline Agreement, Invoice Ref. Number, Inv. Doc. Number (MM), Inv. Doc. Number (FI), Document Currency, Document Amount, Amount in Local Currency, Payment Value, Clearing Document, Clearing Date, Status, and Payment Date. A yellow box labeled 'F' points to the 'Payment Value' column. A yellow box labeled 'A' points to the 'Invoice Ref. Number' column. A yellow box labeled 'C' points to the 'Inv. Doc. Number (MM)' column. A yellow box labeled 'B' points to the 'Clearing Date' column. A yellow box labeled 'H' points to the 'Status' column. A yellow box labeled 'See NOTE below for more information on H' is also present. A yellow box labeled 'Double clicking on any field in this row takes you to another screen where the scanned invoice can be pulled up.' points to the row with Invoice Ref. Number 6600010501 and Inv. Doc. Number 51000346981.

Outline Agreement	Invoice Ref. Number	Inv. Doc. Number (MM)	Inv. Doc. Number (FI)	Document Currency	Document Amount	Amount in Local Currency	Payment Value	Clearing Document	Clearing Date	Status	Payment Date
6600010501	1110263	5100197110	5100160551	USD	568,594.78	568,594.78					
6600010501	1110267	5100213469	5100174517	USD	1,416,859.85	1,416,859.85					
6600010501	1110264	5100349099	5100274139	USD	1,316,580.44	1,316,580.44	1,316,580.44	2001907661	11/19/2006		
6600010501	1110028	5100346981	5100272322	USD	518,775.61	518,775.61	518,775.61	2001970738	12/21/2006		
6600010501	1110032	5100374236	5100292245	USD	1,361,437.99	1,361,437.99	1,361,437.99	2001981837	12/26/2006		
6600010501	1110039	5100003836	5100002379	USD	515,466.76	515,466.76	515,466.76	2002003637	01/10/2007		
6600010501	1110034			USD	536,592.96	536,592.96	536,592.96	2002015859	01/16/2007		
6600010501	1110038			USD	313,575.66	1,313,575.66	1,313,575.66	2002018610	01/17/2007		
6600010501	1110043			USD	375,922.89	1,375,922.89	1,375,922.89	2002042238	01/30/2007		
6600010501	1110047			USD	536,693.94	536,693.94	536,693.94	2002082263	02/19/2007		
6600010501	1110053			USD	337,883.50	1,337,883.50	1,337,883.50	2002136226	03/18/2007		
6600010501	1110056	5100084072	5100070212	USD	1,234,268.62	1,234,268.62	1,234,268.62	2002161038	03/29/2007		
6600010501	1110070	5100139500	5100115902	USD	1,366,514.07	1,366,514.07	1,366,514.07	2002277885	05/24/2007		
6600010501	1110077	5100168359	5100139145	USD	1,316,099.22	1,316,099.22	1,316,099.22	2002277885	05/24/2007		
6600010501	1110074	5100167115	5100138030	USD	519,196.97	519,196.97	519,196.97	2002285277	05/28/2007		
6600010501	1110083	5100206529	5100170381	USD	536,932.39	536,932.39	536,932.39	2002365186	07/06/2007		
6600010501	1110087	5100221442	5100182460	USD	1,358,119.77	1,358,119.77	1,358,119.77	2002369894	07/09/2007		

Item A – TPGC invoice number

Item C – Code identifying the specific Cogen plant

Item F – Invoice amount

Item H – Payment date (Receipt in Bank Date)

In the event the item H, Receipt Date in Bank, does not agree with the value presented in SAP, TPGC's bank statements shall be used to determine the correct date. A sample TPGC bank statement is provided at Appendix C.

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Invoice Display:

The screenshot displays the SAP 'Display Document: Line Item 001' window. The main area shows invoice details for Vendor 10029734 (TIHAMA POWER GENERATION COMPANY) and Company code 1000. The amount is 1,316,580.44 USD. The document number is 5100274139. The 'Additional details' section shows the business area, discount base, payment terms (NT00), and clearing date (11/19/2006). A 'Service: Attachment list' window is open, showing a table with one entry: 'SAO Services Invoice' created on 11/15/2006. Three yellow callout boxes provide instructions: 'First, click this button to pull up this toolbar.' points to the 'Additional Data' button; 'Click on this button to pull up this box.' points to the 'Attachments' button; and 'Double click to see invoice # 1110024 with Service Entry Sheet and other related documents.' points to the 'SAO Services Invoice' entry in the attachment list.

Title	Creator Name	Created On
SAO Services Invoice		11/15/2006

Scanned invoice copies are attached to invoice transaction in the system as outlined above.

The scanned image is provided on the following page.

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Scanned Invoice Display:

Tihama Power Generation Company Ltd. 3rd Floor, Said Business Center II Prince Faisal Bin Fahd Road P.O.Box No. 32212 Al-Khobar - 31952 Kingdom of Saudi Arabia C.R.# 2051029359 Ph.No. +966 3 8876488 Fax.No. +966 3 8821118		شركة تيمامة لتوليد الطاقة المصنوعة مركز المسعود للأعمال (2) الدور الثالث طريق الأمير فيصل بن فهد س.ب. 32212 - الخبر المملكة العربية السعودية س.ت. 2051029359 هاتف: +966 3 8876488 فاكس: +966 3 8821118	
SAP P.O. No: 6510218283 Vendor No: 10029734 TO: Assistant Controller, Operations Accounting Box 5000 DH, 31311 Saudi Arar ATTN: Manager Power Distribution Dept. A-235 Bldg. 3150 LIP, Dhrahan		Invoice No: 1110024 Invoice Date: 17 October 2006 Invoice Period: September 2006 Cost Center: 494554 Invoice Type: <input checked="" type="checkbox"/> Progress <input type="checkbox"/> Retention <input type="checkbox"/> Other Req. CRCCD Concurrence: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	
Details: Ras Tanura Cogen Plant		Power Invoice	
Description:		Consumption (kWh)	Value US Dollars
Capacity Payment for Power		0.00	1,211,802.44
Less Transfer Reserve Deduction		0.00	0.00
Output Payment for Power		103,209,859.00	104,778.00
Total Amount Due		1,316,580.44	
Amount Due		ONE MILLION THREE HUNDRED AND SIXTEEN THOUSAND FIVE HUNDRED AND EIGHTY US DOLLARS AND 44 CENTS	

B (red box's MS&PAD date stamp) is invoice receipt date, Oct-17-06 in this example, that starts 30 day payment clock. This stamp can be hard to see on scanned or fax copies. If this stamp can't be read on the invoice in SAP or Tihama Power's pdf file, Saudi Aramco can either visit Tihama Power's office to verify B or ask Tihama Power what the stamp's date is on their hardcopy of the invoice and accept their word on B's date.

When there is no MS&PAD date stamp, **B** is the later of Invoice Date and Service Entry Sheet's Date of Entry (blue boxes). Invoice receipt date is Oct-17-06 if there was no stamp.

Saudi Arabian Oil Company SERVICE ENTRY SHEET			
CONTRACT NO: 6600010501 PURCHASE ORDER NO: 6510218283 Item: 00001 SERVICE ENTRY NO: 1000548987		WORK PERFORMED: RTR September 2006 Power Invoice	
PROPOSER ORGANIZATION 494 PDD CoGen	494554 COST CENTER Tihama Co-Gen at RTR	CONTRACTOR NAME AND ADDRESS: TIHAMA POWER GENERATION COMPANY LTD. PO Box 32212 AL-KHOBAR 04 31952 SAUDI ARABIA	
NAME OF DEPARTMENT/DIVISION 09/01/2006 - 09/30/2006 TIME - PERIOD KHALED SERVICE ENTRY INITIATOR 96636729718 SERVICE ENTRY INITIATOR TEL.	LOCATION 10/15/2006 DATE OF ENTRY	Vendor ID Number 03 887 6488-12 Telephone Number A. Hakeem Contact	
PAYMENT TERMS:			

Scanned invoice copies and SES documents are easily accessed in the event TPGC documentation is incomplete and/or illegible.

*CHANGE

** ADDITION

NEW INSTRUCTION X

COMPLETE REVISION

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APPENDIX D – ESCROW ACCOUNTS

Samba Financial Group
London Branch

Highgate House
55 Gutter St
Mayfair London W1J 5PW
Tel: 020 7559 6000
Swift: SA3892451, Telex: 655124 SAMBA LG
Fax: 020 7323 4416

Saudi Arabian Oil Company
P O Box 5000
Dhahran 31311
Saudi Arabia
FAO: Abd Allatif A. Al-Othman – Senior Vice President Finance

06 May 2008

Dear Mr Al-Othman,

We are pleased to inform you that as per your request, we have opened the following accounts in the name of:

**SAMBA LONDON RE SAUDI ARAMCO AND TIHAMA ESCROW TRUST
ACCOUNT**

A/C # 50174932 USD JU'AYMAH DISPUTE ESCROW ACCOUNT
A/C # 50174940 USD UTHMANIYAH DISPUTE ESCROW ACCOUNT
A/C # 50174959 USD RAS TANURA DISPUTE ESCROW ACCOUNT
A/C # 50174967 USD SHEDGUM DISPUTE ESCROW ACCOUNT

We would like to express our appreciation for having the opportunity to serve your Banking needs and look forward to a good and mutually beneficial relationship.

Please be assured of our utmost attention at all times and if we can be of assistance to you, please do not hesitate to contact the undersigned.

Yours sincerely


Deana Cobbing
Senior Manager
Samba Financial Group - London

مجموعة سامبا المالية شركة مساهمة سعودية رأس المال 5.000 مليون ريال سعودي، السجل التجاري 10154-1، المركز الرئيسي: الرياض 11511 المملكة العربية السعودية
Samba Financial Group Saudi Joint Stock Company Capital S.R. 4,000 Millions, Commercial Reg. No. 101542314, Head Office: Riyadh P.O. Box 633, Riyadh 77421, Kingdom of Saudi Arabia
Place of Registration (England Branch Number) 339037758
مستطع في إنجلترا رقم الترخيص 339037758
مجموعة سامبا المالية: شركة مساهمة سعودية، مسجلة في المملكة العربية السعودية
Authorized and Regulated by the Financial Services Authority