

No. TCEB/Registrar/2-2/2015/FC-Stage/Review August 08, 2023

DECISION OF THAR COAL & ENERGY BOARD IN THE MATTER OF MOTION FOR LEAVE FOR REVIEW OF FINANCIAL CLOSE STAGE TARIFF DATED 25TH JULY, 2023 FOR SINO SINDH RESOURCES PVT. LIMITED MINE OF 7.8 MTPA AT BLOCK-I THAR COALFIELDS, DISTRICT THARPARKAR, SINDH, PAKISTAN





No. TCEB/Registrar/2-2/2015/FC-Stage/Review August 08, 2023

Decision of Thar Coal & Energy Board in the Matter of Motion for Leave for Review of Financial Close Stage Tariff dated July 25<sup>th</sup>, 2023 for Sino Sindh Resources Pvt. Limited Mine of 7.8 MTPA at Block-I Thar Coalfields, District Tharparkar, Sindh, Pakistan

Thar Coal Tariff Determination Committee

Constituted in Pursuance of Rule 3(1) of Thar Coal Tariff Determination Rules, 2014

Dr Fahad Irfan Siddiqui Member

Mr Ammar Habib Khan Member

Mr Khadim Hussain Channa Member / Presiding Officer



No. TCEB/Registrar/2-2/2015/FC-Stage/Review November 7 2023

In pursuance of the Rule 10(5) of the Thar Coal Tariff Determination Rules, 2014, it is certified that the Thar Coal & Energy Board, on the recommendation of the Thar Coal Tariff Determination Committee, has approved the Decision regarding Motion for Leave for Review of Determination of Financial Close Stage Tariff for Sino Sindh Resources Pvt. Limited Mine of 7.8 MTPA at Block-I Thar Coalfields, District Tharparkar, Sindh, Pakistan, appended in the following pages.

Jalaluddin Mahar

Managing Director
That Coal & Energy Board



#### List of Acronyms used in Determination Order

BCM Bank Cubic Meter

COD Commercial Operations Date
CPI Consumer Price Index
CSA Coal Supply Agreement
EDS Effluent Discharge System

EPC Engineering, Procurement & Construction

GCV
GOP
Government of Pakistan
GOS
Government of Sindh
HSE
Health, Safety & Environment
IDC
Interest During Construction
IRR
Internal Rate of Return

KIBOR
LHV
Lower Heating Value
LIBOR
LONGON Inter-Bank Offer Rate
London Inter-Bank Offer Rate
MBCM
Million Bank Cubic Meter
MJ / Kg
Mega Joules per Kilogram
MSF
Mine Service Facilities

MTPA Million Tonnes Per Annum
MW Megawatt

MV Megawatt
MT Million Tonnes
NCV Net Calorific Value

NEPRA National Electric Power Regulatory Authority

O&M Operations & Maintenance

OGRA Oil and Gas Regulatory Authority

PKR Pakistani Rupee RMB Chinese Renminbi

RCOD Required Commercial Operations Date

ROE Return on Equity

ROEDC Return on Equity During Construction SCOD Scheduled Commercial Operations Date

SCA Sindh Coal Authority

SSRL Sino Sindh Resources (Private) Limited

TCEB Thar Coal & Energy Board

TCTDC Thar Coal Tariff Determination Committee
TT & OD Telegraphic Transfer & On Demand

US United States
USD United States Dollar





The Thar Coal & Energy Board (TCEB) vide its decision No. TCEB/Registrar/2-2/2015/FC-Stage dated July 25<sup>th</sup>, 2023 determined the Financial Close Stage Tariff for Sino Sindh Resources Private Limited (SSRL) for a 7.8 Mtpa mining capacity at Block-I Thar Coalfield District Tharparkar, Sindh, Pakistan. SSRL on July 26<sup>th</sup>, 2023 filed motion for leave to review the decision of TCEB dated July 25<sup>th</sup>, 2023.

The TCEB considered and admitted the review motion ("Review Petition") on July 27<sup>th</sup>, 2023 in accordance with Thar Coal Tariff Determination Rules, 2014.

### 1. TARIFF SOUGHT BY PETITIONER

The Petitioner has submitted a request for determination of levelized tariff of USD 50.38 per Ton for development & operations of 7.8 MTPA capacity mine.

## MATERIAL ASPECTS OF THE PETITION - ANALYSIS & DECISIONS

### 2. OVERBURDEN WASTE VOLUME

TCTDC in the SSRL FC Stage Determination dated July 25<sup>th</sup>, 2023, had deemed the overburden waste to be excessive, thereby suggesting that the amount of overburden removal ought to be lower, resulting in lower requirement for equipment. The Petitioner once again presented similar findings, and statements, which were adequately addressed in the FC Stage Determination dated July 25<sup>th</sup>, 2023.

It is being reiterated that TCTDC strongly affirms the use of the overburden volumes established during the feasibility stage (1834 million cubic meters) for the purpose of evaluating this review petition. However, it is noted that the overburden volumes estimated by SSRL will undergo a reassessment during a confirmatory survey to be conducted at the time of submitting the Commercial Operation Date (COD) Stage Petition.

This re-evaluation is necessitated considering a variance of approximately ~100 M BCM in overburden waste, during operational years. Once the reassessment is done, relevant overburden components, and associated costs can be adjusted at COD stage. It is to be noted that quantity of overburden shall only be adjusted following availability of confirmatory survey.

### 3. EQUIPMENT FLEET CONFIGURATION

In the Review Petition, SSRL maintained that a relatively higher number of equipment, particularly dump trucks, were procured to avoid potential mine idling, as a result of climatic disruptions, and to achieve an early Commercial Operation Date (COD).

However, despite these measures, the Petitioner was unable to achieve the COD within the specified timelines. The Petitioner's argument regarding mine idling due to climatic conditions NDE is deemed invalid since these delays are already considered. Due to the same, any delays due to idling are already incorporated in the allowable operating hours of each equipment during the assessment of the equipment fleet configuration.

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The Petitioner also submitted a set of revised operating parameters e.g. cycle times, fuel consumption, dump distances, loaded and unloaded truck speeds, in-pit dumping distances, etc. After conducting thorough evaluations, TCTDC analyzed the equipment fleet's performance using updated data on shovel cycle times, fuel consumption, loaded truck speed, and dumping distances. In view of updated performance assessment data, the equipment deployment configuration is being revised to align with the latest available data.

However, it is important to note that all equipment requirements, including dump trucks, shovels, and other machinery, will be reevaluated for the operational period at the COD stage. All performance data will be actualized accordingly. The machinery requirement for development and operational period is tabulated in Table I.

Table I - Revised Machinery Requirements

Machinery	TCTDC Calculations (FC Stage Determination)			SSRL Requirements (FC Stage Review)			TCTDC Calculations (FC Review Determination)		
	Development period	Mining period	Total	Development period	Mining period	Total	Development period	Mining period	Total
Hydraulic excavator, 7.0m³	31	48	79	39	82	121	31	55	86
Hydraulic excavator, 2.0m <sup>3</sup>	01	06	07	07	16	23	01	08	09
Dump truck, 60 tonne	256	1116	1372	409	1960	2369	256	1143	1399

It is to be noted that TCTDC had previously raised concerns in the FC Stage determination, dated July 25<sup>th</sup>, 2023 (Section 3) regarding the inefficiency of SSRL's current equipment configuration for a 7.8 MTPA mine capacity.

TCTDC now reiterates its position, emphasizing that the Petitioner is required to submit a comprehensive report on the larger equipment fleet at the time of COD Stage tariff petition. The report must thoroughly assess the various options available, considering factors such as cost-effectiveness, operational efficiency, and the environmental impact. Following the same, equipment deployment and associated costs may change accordingly. Moreover, efforts must be made to utilize auxiliary power from mine-mouth power plants, and transition towards electric vehicles, such that economies of scale can be extracted, and overall fuel costs can be minimized.

To indigenize coal production as much as possible, the Petitioner is also encouraged to devise a plan to reduce reliance on imported spares / consumables. As the utilization of spares/consumables is going to increase substantially in future, the Petitioner should look into developing a localized supply chain for the same, such that reliance on imports can be reduced. This will also spur the development of a downstream industry and reduce reliance on imports accordingly. A plan addressing the same may be shared with the COD Stage tariff petition.



### COAL TARIFF REVISED ORDER

No. TCEB/Registrar/2-2/2015/FC-Stage/Review: The Thar Coal & Energy Board (TCEB) vide its decision No. TCEB/Registrar/2-2/2015/FC-Stage dated July 25th, 2023 determined the Financial Close Stage Tariff for Sino Sindh Resources Private Limited (SSRL) for a 7.8 Mtpa mining capacity at Block-I Thar Coalfield District Tharparkar, Sindh, Pakistan. SSRL on July 26th July, 2023 filed motion for leave to review the decision of TCEB dated July 25, 2023.

The Petitioner has submitted a request for determination of levelized tariff of USD 50.38 per Tonne for development & operations of 7.8 MTPA capacity mine.

The TCEB has considered the Motion for Review Petition and the following Decision with respect to review petition is adjudicated in accordance with the Thar Coal Tariff Determination Rules, 2014:

Table I - Determined 7.8 MTPA Tariff

Project Tariff	Year 1 – 10	Year 11 - 30	Year 1 - 30	
Project faili	Average Average L		Levelized	
Total Production Payment Tariff Components	17.6269	12.9387	16.5207	
Total Capacity Payment Tariff Components	28.2301	15.8870	24.0304	
Total Project Tariff	45.8570	28.8257	40.5512	

All amounts in USD per Ton

Table II - Production Payment Component 7.8 MTPA

Dadiesia Dament Tariff	Year 1 – 10 Year 11 – 30		Year 1 - 30
Production Payment Tariff	Average	Year 11 - 30  Average  1.806 1.063 0.522 5.513 0.539 1.485 2.011 12.939	Levelized
Variable O&M - Foreign (Spares and Consumables)	2.166	1.806	2.062
Variable O&M - Foreign (Tyres)	1.325	1.063	1.283
Variable O&M – Foreign (Lubricants)	0.665	0.522	0.636
Variable O&M - Local (Fuel (Diesel))	7.084	5.513	6.756
Variable O&M – Local (Power (Belts, Crushers, Production Equip))	0.539	0.539	0.539
Asset Replacement	2.650	1.485	2.415
Royalty	3.199	2.011	2.829
Total Production Payment Tariff Components	17.627	12.939	16.521

All amounts in USD per Ton

Table III - Capacity Payment Component

Canadia Daymant Tariff	Year 1 - 10	Year 11 - 30	Year 1 – 30 Levelized	
Capacity Payment Tariff	Average	Average		
Fixed O&M – Foreign (Dewatering OpEx (Spares, Tyres, Lubricants))	0.1812	0.1812	0.1812	
Fixed O&M - Foreign (MSF OpEx (Spares, Tyres, Lubricants))	0.2627	0.2627	0.2627	
Fixed O&M - Foreign (Other OpEx)	4.4352	4.1606	4.3888	
Fixed O&M – Local (Fuel (Dewatering and MSF))	0.2247	0.2247	0.2247	
Fixed O&M – Local (Power (Dewatering and MSF))	1.2870	1.2870	1.2870	
Fixed O&M - Local (Other OpEx)	2.5602	2.3148	2.5130	
Insurance	0.5327	0.5327	0.5327	
Interest on Working Capital	0.7595	0.5399	0.6936	
Debt Principal Repayment	7.5875	-	4.6214	
Debt Interest Payment	4.0159	-	2.9418	
Return on Equity	5.0797	5.0797	5.0797	
Return on Equity During Construction	1.3036	1.3036	1.3036	
Total Capacity Payment Tariff Components	28.2301	15.8870	24.0304	

All amounts in USD per Ton

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Table IV - Project Cost for Development of 7.8 MTPA Mining Capacity

Project Cost for 7.8 MTPA	Petitioned	Determined
EPC Cost	847.24	593.22
Non-EPC Cost	118.20	98.19
Insurance Cost	4.65	4.13
Financing Fee, LC Charges, sinosure Fees etc.	59.00	43.10
Interest During Construction	34.80	95.12
Pre-COD Sales	(94.50)	(76.68)
Import Duties and Taxes	33.00	0.00
Total Project Cost	1002.4	757.083

All amounts in USD Million





### **GENERAL CONDITIONS**

- The contract stage tariff is computed on the basis of net capacity production of 7.8 MTPA for thirty (30) years.
- ii. The above tariff is applicable for a period of 30 years on BOO basis commencing from Commercial Operations Date of the 7.8 MTPA coal mine.
- iii. The basis of this determination is a Debt to Equity ratio of 75:25. Quantum of equity, or other external capital in excess of 25% will be treated as commercial debt to the project at the prevailing rates but not to exceed the actual interest rate of the commercial loan.
- iv. Debt servicing shall be paid during the first 10 years.
- v. Pre-COD sale of lignite will be priced at the full first year tariff of coal as per this Determination. The proceeds of this sale will be utilized to finance project costs.
- vi. The Petitioner is instructed to submit all the financing documents, and all relevant details at COD stage.
- vii. Petitioner is advised to submit the payment proof related to expenses incurred under development and resettlement cost at COD stage.
- viii. Short-term working capital facilities for inventories of coal, lubricants, diesel, RFO, spares and consumables, account receivable and account payable and the resultant cost is permitted; provided that the financing cost of the working capital facility shall not exceed a maximum of 1 Month KIBOR + 2%.
- ix. The Petitioner is entitled to indexations in accordance with the mechanisms laid down under the 'TARIFF INDEXATIONS' section of this document.
- x. All equipment proposed under the EPC Contract should be new and unused.
- xi. The detailed cost components of tariff are tabulated in Annexure-A appended to the end of this Order.



### **Tariff Indexations**

The indexations shall be applicable on the tariff shall only be as detailed hereunder:

### i. Fuel Cost

$$Fuel Cost_{(rev)} = Fuel Cost_x \times \frac{Diesel Price_{(rev)}}{276.24}$$

Where,

Fuel Cost<sub>(rev)</sub> is the revised total Fuel Cost Component

Fuel Cost<sub>x</sub> is the total Fuel Cost of x<sup>th</sup> year of operations

Diesel Price $_{(rev)}$  is the Delivered Diesel Price in terms of PKR per Litre notified by OGRA for Islamkot, District Mithi adjusted for NCV-GCV factor (Reference - 1.0574), Specific gravity (Reference - 0.84), and Calorific Value (Gross) (Reference - 44.2MJ/kg)

Frequency of indexation shall be as and when notified by Oil & Gas Regulatory Authority

### ii. Variable O&M

$$Variable \ O\&M_{(rev)} = Variable \ O\&M_x \ \times \frac{US \ CPI_{(rev)}}{303.84} \times \frac{PKR/USD_{(rev)}}{286.75} \times \frac{7.13}{RMB/USD_{(rev)}}$$

Where.

Variable O&M<sub>(rev)</sub> is the revised Variable O&M Component

Variable O&M<sub>x</sub> is the Variable O&M Component of xth year of operations

US CPI<sub>(rev)</sub> is the latest United States Consumer Price Index for All Urban Consumers (CPI-U) notified by the US Bureau of Labor Statistics

PKR/USD (rev) is the revised TT & OD selling rate of US Dollars as on the date on which the indexation is applicable, as notified by the National Bank of Pakistan

 $\mathsf{RMB/USD}_{(\mathsf{rev})}$  is the revised TT & OD selling rate of Chinese RMB as on the date on which the indexation is applicable, as notified by the People's Bank of China

Frequency of indexation shall be quarterly

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#### iii. **Asset Replacement**

$$Asset \, Replacement_{(rev)} = Asset \, Replacement_{x} \, \times \, \frac{US \, CPI_{(rev)}}{303.85} \, \times \, \frac{PKR/USD_{(rev)}}{286.75} \, \times \, \frac{7.13}{RMB/USD_{(rev)}}$$

Where.

Asset Replacement(rev) is the revised Asset Replacement Component

Asset Replacement x is the Asset Replacement Component of xth year of operations

US CPI(rev) is the latest United States Consumer Price Index for All Urban Consumers (CPI-U) notified by the US Bureau of Labor Statistics

PKR/USD (rev) is the revised TT & OD selling rate of US Dollars as on the date on which the indexation is applicable, as notified by the National Bank of Pakistan

RMB/USD(rev) is the revised TT & OD selling rate of Chinese RMB as on the date on which the indexation is applicable, as notified by the People's Bank of China

Frequency of indexation shall be quarterly

#### iv. Royalty

$$Royalty_{(rev)} = Coal Price_y \times Royalty$$

Where.

Royalty<sub>(rev)</sub> is the revised Royalty Component

Coal Price, is the Price of Coal (excluding Royalty) in yth month of operations

Royalty is the minimum of 7.5% of Total cost of Coal (excluding Royalty) or as otherwise notified by GoS for Royalty in Thar Coalfields

Frequency of Indexation shall be as and when notified by GoS

#### Fixed O&M - Local V.

Fixed 
$$0\&M - Local_{(rev)} = Fixed  $0\&M - Local_x \times \frac{Local CPI_{(rev)}}{235.23}$$$

Where.

Fixed O&M - Local(rev) is the revised Fixed O&M - Local Component

Fixed O&M - Local<sub>x</sub> is the Fixed O&M - Local Component in x<sup>th</sup> year of operations



Local CPI<sub>(rev)</sub> is the latest is Consumer Price Index of Pakistan as notified by the Pakistan Bureau of Statistics on base of 2015-16 = 100

Frequency of Indexation shall be quarterly

## vi. Fixed O&M - Foreign

$$\text{Fixed O\&M Foreign}_{(\text{rev})} = \text{Fixed O\&M Foreign}_{x} \times \frac{\text{US CPI}_{(\text{rev})}}{303.85} \times \frac{\text{PKR/USD}_{(\text{rev})}}{286.75} \times \frac{7.13}{\text{RMB/USD}_{(\text{rev})}}$$

Where,

Fixed O&M - Foreign(rev) is the revised Fixed O&M Component

Fixed O&M – Foreign x is the Fixed O&M Component of  $x^{th}$  year of operations

US  $CPI_{(rev)}$  is the latest United States Consumer Price Index for All Urban Consumers (CPI-U) notified by the US Bureau of Labor Statistics

PKR/USD (rev) is the revised TT & OD selling rate of US Dollars as on the date on which the indexation is applicable, as notified by the National Bank of Pakistan

RMB/USD<sub>(rev)</sub> is the revised TT & OD selling rate of Chinese RMB as on the date on which the indexation is applicable, as notified by the People's Bank of China

Frequency of indexation shall be quarterly

## vii. Power Cost - By RFO

Power Cost – By RFO<sub>(rev)</sub> = Power Cost – By RFO<sub>x</sub> 
$$\times \frac{\text{RFO Price}_{(rev)}}{160.000}$$

Where.

Power Cost – By RFO (rev) is the revised Power Cost – By RFO

Power Cost – By RFO<sub>x</sub> is the Power Cost – RFO in x<sup>th</sup> year of operations

RFO Price<sub>(rev)</sub> is the Delivered RFO Price in terms of PKR per ton notified by Ex-Refinery Byco Price,

Frequency of indexation shall be as and when notified by Byco.





### viii. Cost of Working Capital

$${\rm WC_{(rev)} = \ WC_x \times \left( a_x \frac{{\rm Prod \ Pmt_{(rev)}}}{{\rm Prod \ Pmt_x}} + \ b_x \frac{{\rm Coal_{(rev)}}}{{\rm Coal_x}} + \ c_x \frac{{\rm Dicsel_{(rev)}}}{276.24} + \ d_x \frac{{\rm US \ CPI_{(rev)} \times \ PKR/USD_{(rev)} \times 7.13}}{303.85 \times 286.75 \times {\rm RMB/USD_{(rev)}}} \right) \times \frac{{\rm KIBOR_{(rev)} + 2.00\%}}{24.77\%}}{24.77\%}}$$

Where.

Cost of WC(rev) is the revised Cost of Working Capital Component

Cost of WC<sub>x</sub> is the Cost of Working Capital in x<sup>th</sup> year of operations

 $a_x$  is the proportion of Coal Inventory Cost for 30 days calculated at Production Payment Price to amount of working capital facility in  $x^{th}$  year of operation

 $b_x$  is the proportion of Production Payment Price for 60 days to amount of working capital facility in  $x^{th}$  year of operations

 $c_x$  is the proportion of Fuel Cost for 21 days to amount of working capital facility in  $x^{th}$  year of operations

Prod Pmt<sub>(rev)</sub> is the Production Payment Price as determined by TCEB after incorporating indexations till latest month

Prod  $Pmt_x$  is the Production Payment Price as determined by TCEB for  $x^{th}$  year of operations

Coal<sub>(rev)</sub> is the Coal Price (excluding Working Capital Component) as determined by TCEB after incorporating indexations till latest month

 $Coal_x$  is the Coal Price (excluding Working Capital Component) as determined by TCEB at COD for  $x^{th}$  year of operations

Diesel Price<sub>(rev)</sub> is the Delivered Diesel Price in terms of PKR per Litre notified by OGRA for Islamkot, District Mithi adjusted for NCV-GCV factor (Reference – 1.0574), Specific gravity (Reference – 0.84), and Calorific Value (Gross) (Reference – 44.2MJ/kg)

KIBOR<sub>(rev)</sub> is 1-Month KIBOR rate at the end of the 1 month period prior to the month in which indexation is applicable, as notified by the State Bank of Pakistan

Frequency of Indexation shall be monthly

### ix. Interest Payments

$$Interest - Local_{(rev)} = Interest - Local_x \times \frac{KIBOR_{(rev)} + 2.00\%}{24.77\%}$$

Where,

Interest - Local(rev) is the Interest Payment - Local Component

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Interest – Local<sub>x</sub> is Interest Payment – Local Component determined by TCEB for  $x^{th}$  year of operations, subject to adjustment on account of escalations till COD.

 $KIBOR_{(rev)}$  is the relevant KIBOR rate prevailing for  $x^{th}$  year of operations, as notified by State Bank of Pakistan

Frequency of Indexation shall be semi-annually or as repayments are agreed with lender

### x. Equity Returns

Equity Returns<sub>(rev)</sub> = Equity Returns<sub>x</sub> 
$$\times \frac{PKR/USD_{(rev)}}{286.75}$$

Where,

Equity Returns(rev) is the revised Equity Returns Component

Equity Returns<sub>x</sub> is the Equity Returns component determined by TCEB for  $x^{th}$  period of operations

PKR/USD (rev) is the revised TT & OD selling rate of US Dollars as on the date on which the indexation is applicable, as notified by the National Bank of Pakistan

Frequency of Indexation shall quarterly

### xi. Cost of Transportation

Cost of Transportation<sub>(rev)</sub> = Cost of Transportation<sub>x</sub> 
$$\times \frac{\text{Diesel Price}_{(\text{rev})}}{276.24}$$

Where,

Cost of Transportation(rev) is the revised Cost of Transportation applicable on tariff

Cost of Transportation<sub>x</sub> is the Cost of Transportation applicable on tariff as determined by TCEB for  $x^{th}$  period of operations

Diesel Price $_{(rev)}$  is the Delivered Diesel Price in terms of PKR per Litre notified by OGRA for Islamkot, District Mithi adjusted for NCV-GCV factor (Reference – 1.0574), Specific gravity (Reference – 0.84), and Calorific Value (Gross) (Reference – 44.2MJ/kg)

Frequency of Indexation shall be as notified by OGRA

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## xii. Heat Content Adjustment

$$\text{Adjusted Prod Pmt}_{(\text{rev})} = \text{ Prod Pmt}_{x} \times \frac{\text{Heating Value}_{(\text{ref})}}{\text{Heating Value}_{(\text{rev})}}$$

Where

Adjusted Prod  $Pmt_{(rev)}$  is the Production Payment Price adjusted for heating value (LHV) Indexed Prod  $Pmt_x$  is the reference Production Payment Price in  $x^{th}$  year of operations Indexation shall be computed annually.



# Thar Coal & Energy Board

# Government of Sindh

# TARIFF TABLE 7.8 MTPA MINE:

ANNEXURE A

Year	Variable O&M	Fixed O&M	Working Capital Interest	Insurance	Asset Replacement	Royalty	ROEDC	ROE	Principal	Interest	Tariff
1	12.97	9.72	0.80	0.53	2.85	3.36	1.30	5.08	4.98	6.63	48.23
2	12.91	8.89	0.79	0.53	2.85	3.30	1.30	5.08	5.43	6.18	47.27
3	12.91	9.59	0.80	0.53	2.85	3.35	1.30	5.08	5.92	5.68	48.03
4	12.96	8.79	0.78	0.53	2.24	3.25	1.30	5.08	6.46	5.15	46.55
5	12.96	9.45	0.79	0.53	2.23	3.30	1.30	5.08	7.04	4.56	47.25
6	10.37	8.21	0.72	0.53	2.86	3.05	1.30	5.08	7.68	3.92	43.73
7	10.37	8.83	0.72	0.53	2.67	3.08	1.30	5.08	8.38	3.22	44.20
8	10.37	8.31	0.72	0.53	2.67	3.04	1.30	5.08	9.14	2.46	43.64
9	10.37	9.18	0.73	0.53	2.63	3.11	1.30	5.08	9.97	1.63	44.53
10	11.57	8.54	0.75	0.53	2.63	3.15	1.30	5.08	10.87	0.73	45.16
11	10.86	9.00	0.59	0.53	2.63	2.25	1.30	5.08	-)	-	32.25
12	10.86	9.01	0.59	0.53	2.63	2.25	1.30	5.08	-	-	32.27
13	10.86	8.57	0.59	0.53	2.59	2.21	1.30	5.08	-	-	31.74
14	9.65	8.10	0.55	0.53	2.43	2.07	1.30	5.08	-	-	29.71
15	9.65	8.64	0.56	0.53	2.37	2.11	1.30	5.08		-	30.24
16	9.65	8.12	0.55	0.53	2.37	2.07	1.30	5.08	-	-	29.67
17	9.65	8.70	0.56	0.53	2.33	2.11	1.30	5.08	-	-	30.27
18	9.65	8.29	0.55	0.53	2.33	2.08	1.30	5.08	-	(#C	29.81
19	9.65	8.59	0.55	0.53	2.03	2.08	1.30	5.08	-0	-	29.82
20	9.65	8.19	0.55	0.53	1.98	2.05	1.30	5.08	-	-	29.33
21	9.65	9.34	0.55	0.53	1.35	2.09	1.30	5.08	-	-	29.89
22	9.65	8.12	0.54	0.53	1.33	1.99	1.30	5.08	-	-	28.54
23	9.64	8.77	0.54	0.53	0.76	2.00	1.30	5.08	-	-	28.63
24	9.64	8.13	0.53	0.53	0.73	1.95	1.30	5.08	-	-	27.90
25	9.64	8.59	0.53	0.53	0.47	1.96	1.30	5.08	-	-	28.11
26	9.64	8.10	0.53	0.53	0.47	1.92	1.30	5.08	-	-	27.58
27	9.64	8.50	0.53	0.53	0.42	1.95	1.30	5.08	-	-	27.96
28	9.64	8.26	0.53	0.53	0.42	1.93	1.30	5.08	-	-	27.70
29	5.82	7.78	0.43	0.53	0.03	1.57	1.30	5.08	-	-	22.56
30	5.76	7.83	0.43	0.53	0.02	1.57	1.30	5.08	-	*	22.54
									DENE		40.55



