Developments in the Coal Sector - Bidding and its Implications for the Power Sector

9th Capacity Building Programme for Officers of Electricity Regulatory Commissions

November 21, 2015

IIT Kanpur

Agenda

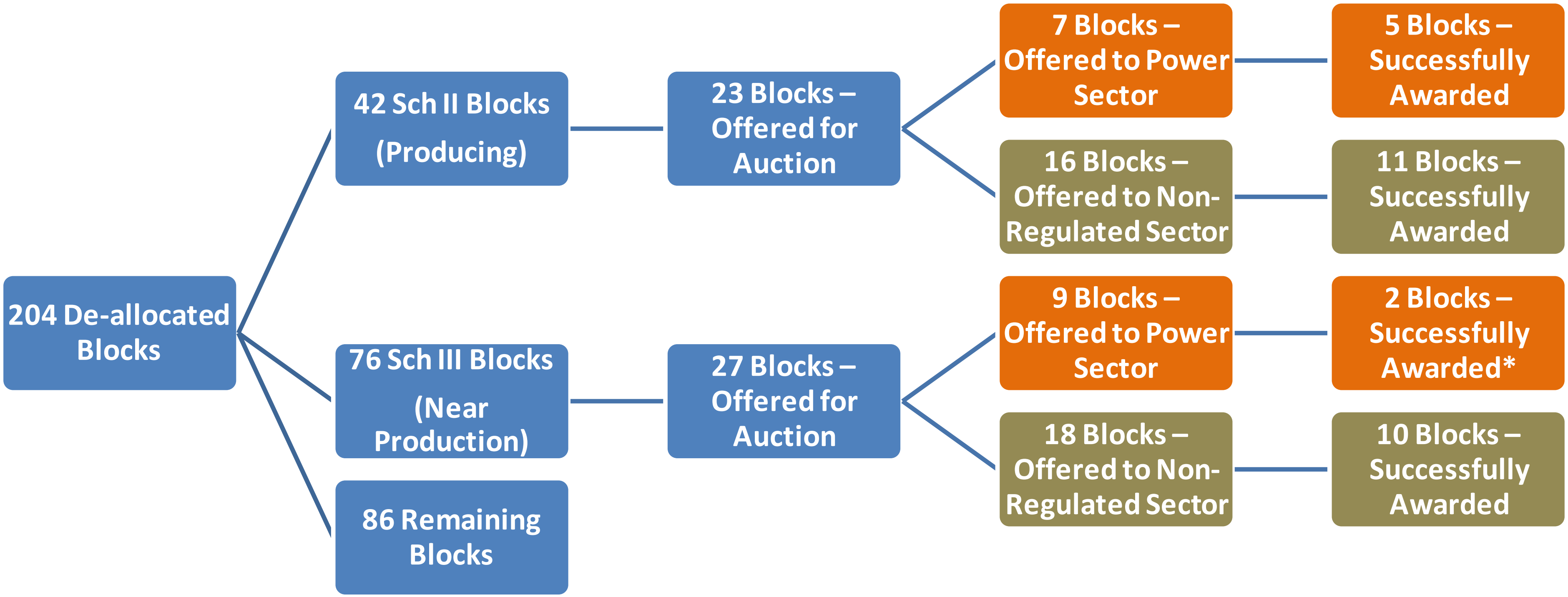
- ***Coal Mine Auction Process - Power Sector***
- ***Impact of Coal Mines Auction on Power Sector***
- ***Conclusion***

Coal Mine Auction Process - Power Sector

Auction of Coal Blocks - Background

May 2012	• Comptroller and Auditor General of India released a report on the coal block allocations
Sept 2014	• Supreme Court of India cancelled the allocation of 204 coal blocks
Oct 2014	• Government promulgated the Coal Mines (Special Provisions) Ordinance, 2014 for allocation of de-allocated coal blocks
Dec 2014	• Government issued the Coal Mines (Special Provisions) Rules, 2014 • Start of the auction process for Schedule II coal blocks – Round 1
Jan 2015	• Start of the auction process for Schedule III coal blocks – Round 2
Mar 2015	• Enactment of the Coal Mines (Special Provisions) Act, 2015
Jun 2015	• Start of the Round 3 of auction process

Classification of Coal Blocks



**Matter sub-judice w.r.t. 2 blocks*

Overview of the Auction Process

- Government of India (GoI) appointed the **Nominated Authority** to take all the necessary actions for allocation of cancelled coal mines
- Permissible Specified End Uses
  - Production of iron & steel, cement and generation of power for captive use i.e. Non-Regulated Sector
  - Generation of Power i.e. Regulated Sector

  Each mine is earmarked for a Specified End Use by the Central Government
- Methods of Bidding
  - Ascending Forward Auction (for non-regulated sectors) where revenue will be maximized for State Govt
  - Descending Reverse Auction (for regulated sector) where power tariff will be minimized as the rate quoted by Successful Bidder will determine its Variable Charge
- The 2-stage auction process comprises
  - Technical Bid (compliance with the Eligibility Conditions)
  - Financial Bid comprising
    - Initial Price Offer and
    - Final Price Offer
- Initial Price Offer to be submitted along with the Technical Bid

Auction Process for Power Sector - Eligible Bidders

- Eligible Companies
  - A Company engaged in the specified end use including
    - a company having a coal linkage or
    - having made an application for a coal linkage
  - A Joint Venture (JV) Company formed by two or more companies each having a common specified end use
- If a Bidder is a JV Company, then each JV Partner should
  - hold at least 20% of voting rights and economic interest in the JV Company
  - independently meet the qualifying requirements regarding specified end use and specified expenditure of the total project cost
  - Coal requirements of Specified End Use Plant (EUP) belonging to each of the JV Partners shall be considered collectively

Technical Bid | Eligibility Conditions

- Any eligible company can participate in auctions provided it meets all the Eligibility Conditions
  - In case the Bidder is a Prior Allottee,
    - it has paid the applicable Additional Levy within prescribed time period;
    - it has not been convicted for an offence relating to coal mine allocation and sentenced with imprisonment for more than three years
- Extractable reserves of a specific coal mine should not exceed 150% of 30-year coal requirement of a Specified EUP **less** the coal requirement of such EUP met from any other coal mine allocated to the Bidder thro' auction or allotment by the Nominated Authority

Technical Bid | Eligibility Conditions ...2

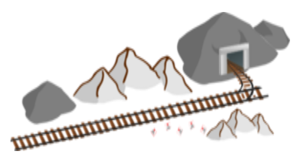
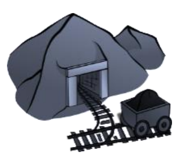
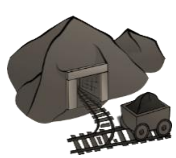
EUP Configuration	Annual Coal Requirement @85% Plant Load Factor or Capacity Utilisation	30-year Coal Requirement	Eligible to Bid for Coal Mine with Reserves @150% of 30-year requirement
Single 660 MW Unit	2.7 MTPA	81 MT	Up to 121 MT
3X330 MW	4 MTPA	120 MT	Up to 180 MT
2X330 + 2X660 MW	8.1 MTPA	242 MT	Up to 363 MT

Bidders have flexibility in configuring the EUP(s)

Technical Bid | Eligibility Conditions …3

EUP

Annual Coal Requirement	30-year Coal Requirement	Eligible to bid for Coal Mine with Reserves of
5 MTPA @85% Plant Load Factor	**150 MT**	**225 MT** @150% of 30-year requirement

Auction Sequence/ Round	Coal Mine & Capacity	Auction Status	Residual Unmet Requirement
1	 Mine 'X' 120 MT	Highest/Lowest ✓	105 MT
2	 Mine 'Y' 80 MT	Highest/Lowest ✓	25 MT
3	 Mine 'Z' 50 MT	Not Eligible ✗	25 MT

Technical Bid | Eligibility Conditions ...4

- Total Project Cost & Expenditure
  - Bidder should have incurred an expenditure of
    - at least 80% of the Total Project Cost of a unit or phase of the specified EUP(s) for Schedule II Coal Mines
    - at least 60% of the Total Project Cost of a unit or phase of the specified EUP(s) for Schedule III Coal Mines
  - If EUP is being commissioned in units or phases and one or more units or phases are eligible under above provision, then
    - at least 40% expenditure of the cost should already have been incurred on such other units or phases for Schedule II Coal Mines
    - at least 30% expenditure of the cost should already have been incurred on such other units or phases for Schedule III Coal Mines

Selection of Successful Bidder

- At the time of Technical Bid, Bidders registered with MSTC to submit
  - Prescribed Bid Security as per Tender Document of respective coal mine
  - Technical Bid (relevant eligibility certificates/documents)
  - Initial Price Offer (IPO)
- IPO is a price offer in Rs./tonne of coal below the Ceiling Price
- Technical Evaluation Committee will evaluate Technical Bids
- Technically Qualified Bidders (TQB) will be shortlisted
- IPOs of only TQBs will be opened and ranked on the basis of the ascending price offers
- Only top 50% ranked TQBs (by the IPOs) i.e. Qualified Bidders (QB) will be permitted to participate in e-auctions
- Applicable Ceiling Price for the e-auction will be the lowest IPO offered by a QB

Selection of Successful Bidder ...2

- Assume 16 Bidders for a specific mine X
- Bidders registered with MSTC - A, B, C ………… O, P
- All Bidders submitted documents for Technical Bid and Initial Price Offer (IPO) on MSTC e-auction platform
- IPOs of all Bidders reside in fully encrypted form on MSTC platform

- Technical Evaluation Committee will evaluate the Technical Bids of 16 Bidders
- Assume 3 Bidders (C, H, I) did not qualify technically
- So, the Technically Qualified Bidders are 13
- IPOs of 13 Technically Qualified Bidders will be opened
- IPOs of 3 technically unqualified bidders (C, H, I) will still remain in fully encrypted form on MSTC platform

- IPOs of 13 Technically Qualified Bidders will be arranged in ascending order
- Assume IPOs of 8 Technically Qualified Bidders in top 50% by ranking (say 3 bids are tied at 4th rank)
- All these 8 Qualified Bidders will be allowed to participate in the e-auction

Selection of Successful Bidder ...3

Qualified Bidder

Preferred Bidder

Successful Bidder

- For the e-auctions, the applicable Ceiling Price will be the prices discovered i.e. lowest IPO received from the Technically Qualified Bidders
- Say top 50% ranking bids are Rs. 182, Rs. 188, Rs. 197, Rs. 221, Rs. 250, Rs. 285 and Rs. 305 for mines reserved for regulated sector, the Ceiling Price for auctions will be Rs. 182

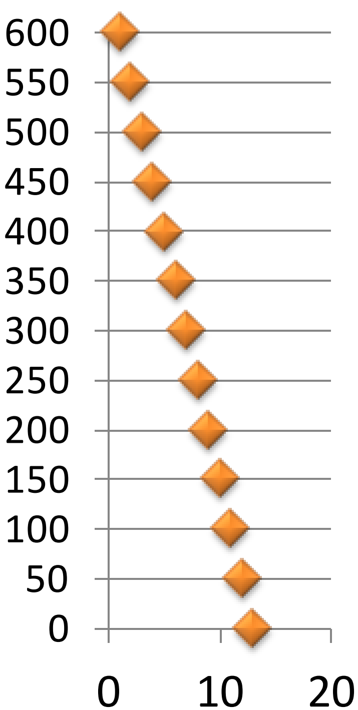
- 8 Qualified Bidders will participate in the auction and submit Final Price Offers (FPOs) on MSTC e-auction platform
- Qualified Bidder who submits the lowest FPO will be declared as Preferred Bidder (say 'O')

- The Nominated Authority will recommend the name of Preferred Bidder 'O' to Central Government
- When GoI directs the Nominated Authority to issue Vesting Order, the Preferred Bidder 'O' will become the Successful Bidder
- On making prescribed payments within stipulated time period, the Successful Bidder will receive the Vesting Order from the Nominated Authority

Selection of Successful Bidder …4

- The QB who offers the lowest Final Offer Price (FPO), as applicable in e-auction will be declared as a Preferred Bidder
  - On receiving IPO as Zero (0) in technical bid stage or once FPO hits Zero (0) on e-auction platform, Ascending Forward Auction will commence
  - Additional Premium payable to respective states will be selection criteria and QB who quotes highest will be chosen as PB

Descending Reverse Auction for FPO (Rs./tonne)



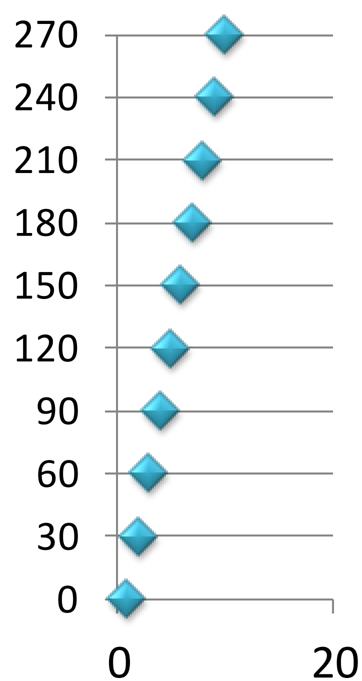
Ceiling Price after Technical Bids

Say, the Initial Price Offers were:

Rs. 852
Rs. 776
Rs. 747
Rs. 695
Rs. 600

Ceiling Price in Tender Document
R. 870

Ascending Forward Auction for Additional Premium (Rs./tonne)



If price discovered during Technical Bid stage (IPOs) or during e-auctions, FPO reaches INR 0 (Rs.Zero), then Forward Auction for Additional Premium will commence and Bidder willing to pay highest Additional Premium to respective state governments will be chosen.

Additional Premium shall not be reckoned for the purpose of Power Tariff.

IPO/FPO does not include Rs. 100/ tonne Payable

Selection of Successful Bidder ...5

- The Nominated Authority will recommend the name of the Preferred Bidder (PB) to the Central Government
- When GoI directs the Nominated Authority to issue Vesting Order, the Preferred Bidder will become the Successful Bidder
- Successful Bidder shall execute a Coal Mine Development and Production Agreement (CMDPA) with the Nominated Authority
- Subsequently, Vesting Order will be issued to the Successful Bidder by the Nominated Authority

One Time Payments by Successful Bidder

- Fixed Amount will be payable prior to the Vesting Order
  - for the value of land and mine infrastructure
  - cost of preparation of Geological Report borne by the Prior Allottee
  - cost of obtaining all statutory licenses, permits, permissions, approvals, clearances or consents relevant to the mining operations, borne by the Prior Allottee
  - the Transaction Expense
- The Successful Bidder shall pay the Upfront Amount (amount mentioned in Tender Document) in 3 instalments as follows
  - 50% of the Upfront Amount prior to issuance of the Vesting Order
  - 25% of the Upfront Amount
    - Sch II Coal Mines – within 6 months from the date of issuance of Vesting Order
    - Sch III Coal Mines – on or prior to expiry of 15 Business Days from the date of execution of Mining Lease
  - Remaining 25% of the Upfront Amount
    - Sch II Coal Mines – within 12 months from the date of issuance of Vesting Order
    - Sch III Coal Mines – on or prior to expiry of 15 Business Days from the date of grant of mine opening permission

Periodic Payments

- The Successful Bidder shall
  - make monthly payments for the coal extracted at Rs. 100/tonne plus Additional Premium, if any
  - payment to be made within 20 calendar days of expiry of each month
- Statutory royalty payable on coal will continue to be governed as per extant rules
- If the Successful Bidder undertakes sale of power up to 15% of generation capacity of EUP on merchant basis, then Rs. 100/tonne shall stand revised to such new price (mentioned in Tender Document of each mine) for the quantum of coal utilised for generation of such power sold on merchant basis.

Periodic Payments ...2


EUP – 3X660 MW

Say, Coal Requirement of the EUP is 8.1 MT @85% Plant Load Factor

PPA	Coal Utilisation	Price/ Tonne	Energy Charges for Tariff	Applicable Annual Escalation
Medium Term/ Long Term	85-100% of mined coal (i.e. 6.9-8.1 MT)	Rs.100	(FPO+Rs.100)/tonne + Royalties + Taxes + other permissible components of energy charge	As notified by Ministry of Power under Standard Bidding Document for Case 1
Merchant Sale	0-15% of mined coal	Say Rs.270	As per market	Wholesale Price Index (all commodities)

- **EUP will be permitted to utilise only 15% of the linked generation capacity of EUP or 15% of approved mining plan whichever is lower**
- Accordingly, say the above EUP manages to win only a single coal mine with 80 MT reserves and Peak Rated Capacity of 3 MT/annum
  - EUP can utilise up to 0.45 MT of coal towards merchant power (i.e. 15% of 3 MT)
  - It can utilise coal of 2.55 MT towards long or medium term PPAs or sell surplus (/all) coal to CIL at CIL Notified Price or Final Price Offer whichever is lower
  - Power tariff of existing long or medium term PPAs may get revised downward (↓) by Appropriate Commission as “Change in Law”.

Periodic Payments ...3

- Payments shall be subject to a yearly escalation
  - Final Price Offer, Additional Premium and Fixed Price of Rs. 100/tonne
    - Escalation formula prescribed in new Standard Bidding Document for Case 1 bidding by Ministry of Power for escalation of fuel cost from captive mines
  - For new price relating to power being sold on merchant basis, Wholesale Price Index (all commodities) will be applicable
- Excess coal extracted beyond entitlement of the Bidder shall be supplied to CIL at the aggregate of Final Price Offer based on which the Successful Bidder has been selected and the Fixed Rate, as escalated or the then prevailing CIL Notified Price, whichever is lower
- Energy charges for tariff shall be aggregate of
  - the Final Price Offer
  - Rs. 100/tonne
  - Statutory levies and other permissible components of energy charge

Bid Security

- The Bidder shall furnish a Bid Security to the Nominated Authority (in the form of a Bank Guarantee) as a part of its Bid, for an amount mentioned in that particular Tender Document
- Bid Security shall have a validity period of not less than 240 days from the Bid Due Date, inclusive of a claim period of 60 days, and may be extended as may be mutually agreed
- Bid Security of unsuccessful Bidders will be returned by the Nominated Authority, without any interest
  - on issuance of Vesting Order or
  - when the tender process is cancelled by the Nominated Authority
- Bid Security of Successful Bidder will be returned, without any interest, on signing of CMDPA and furnishing Performance Security
- The Nominated Authority shall be entitled to forfeit and appropriate the Bid Security as Damages as specified in the Tender Document

Performance Security

- Within specified time, the Successful Bidder shall provide an irrevocable and unconditional Performance Bank Guarantee for the performance of its obligations
- The amount of Performance Security shall be aggregate of
  - 1 year royalty based on Peak Rated Capacity (as per Mining Plan) payable to respective State Government for a particular coal mine
  - Annual peak rated capacity of the Coal Mine (as per the approved Mine Plan) multiplied by the Final Price Offer based on which the Successful Bidder has been selected
    - In case of any upward revision in Mine Plan, the amount of Performance Security shall be revised accordingly
- Performance Security shall remain valid for such duration as specified in the CMDPA
- The Performance Security may be appropriated by the Nominated Authority in the manner specified in CMDPA

Change in Control and Composition of Bidder

- A change in the composition of the Bidder, where Bidder is a JV Company is not permitted without the approval of GoI.
  - If one of the JV Partner becomes ineligible or ceases to be a JV Partner,
    - the JV Company may supply coal to the remaining JV Partners subject to the condition that each such remaining JV Partners shall not be entitled to receive coal in excess of the eligibility conditions
    - coal extracted in excess of the limit specified above shall be supplied to CIL at the CIL Notified Price
- Change in Control prior to determination of Successful Bidder
  - No change in control shall be permitted without prior approval of Nominated Authority
  - Approval for change in Control shall be granted only in case such change in control does not make the Bidder ineligible in accordance with the Bid Criteria

Change in Control and Composition of Bidder

- Change in Control of Successful Bidder or transfer of the EUP along with the rights in relation to the Coal Mine shall be permissible with prior intimation to the Nominated Authority and the Central Government if
  - such change in Control does not result in the Successful Bidder becoming non compliant with any of the Eligibility Conditions or the transferee is also compliant with the Eligibility Conditions, as applicable
  - such change in Control or transfer does not require any prior consent, approval, no-objection certificate or the like under any Applicable Law
  - If such change in control and transfer requires prior consent, approval etc., then such approval shall be granted if
    - the transferee or the Successful Bidder subsequent to change of Control, as the case may be, also meets all the Eligibility Conditions, as applicable, or
    - the Successful Bidder continues to meet all the Eligibility Conditions, as applicable.

Utilisation of Coal

- Successful Bidder shall not be permitted to use the coal extracted from a coal mine for any purposes other than utilisation in EUP.
- Any middlings or washery rejects generated from a coal mine may be sold by the Successful Bidder only with the prior approval of the Coal Controller's Organisation.
- Utilisation of coal for any other EUP of the Successful Bidder shall also be permitted in accordance with Rule 20 of the notified Rules.

Rule 20: Utilisation of coal for any other plant of the successful allocatee

- *(1) A successful bidder or allottee proposing to utilise the coal mined from a particular Schedule I coal mine for any of the other plants of such successful bidder or allottee or its subsidiary company for common specified end use in accordance with the provisions of subsection (2) of section 20 of the Act, shall provide prior intimation to the Central Government in writing.*
- *(2) The intimation referred in sub-rule (1) shall be provided at least thirty business days prior to the intended date of such utilisation.*
- *(3) The Central Government may seek further information regarding such utilisation as it may deem fit and may impose such terms and conditions as may be found necessary.*

Utilisation of Coal ...2

- Successful Bidder shall also be permitted to enter into arrangements for optimal utilisation of the Coal Mine in accordance with Rule 19 of the notified Rules.

Rule 19: Arrangements for optimal utilisation of coal mines

- *(1) A successful bidder or allottee or a coal linkage holder proposing to enter into any agreements or arrangements referred to in sub-section (1) section 20 of the Act shall make an application to the Central Government in writing.*
- *(2) The application referred to in sub-rule (1) shall include the complete particulars of the following, namely:- (a) parties to the proposed agreements or arrangements; (b) the proposed agreements or arrangements; and (c) the manner in which such agreements or arrangements would achieve optimal utilisation of coal mines and cost efficiencies.*
- *(3) The Central Government may seek such further information regarding the proposed agreement or arrangements as it may deem fit.*
- *(4) The Central Government may after such investigation as may, in its opinion be necessary, by an order in writing, grant its approval or reject the proposed agreement or arrangements, in whole or in part.*
- *(5) Upon execution of such agreements or arrangements, a certified copy of the same shall be deposited with the Central Government within fifteen business days of such execution.*

Challenges Experienced during the Process

- Transaction was first of its kind with no precedents to refer to
- Stringent timelines were stipulated for the process pursuant to the order issued by Supreme Court
- Ensuring coherence between the tasks done by different agencies
- Ensuring maximum information dissemination (within a limited time) to the Bidders so that value can be enhanced
- Conduct a fair and transparent process in the stipulated timeframe
- Keeping pace with a dynamic process wherein decisions were taken based on external factors
- High stakes and immense scrutiny from media and other stakeholders

Impact of Coal Mines Auction on Power Sector

Sources of Fuel Supply

- Pursuant to cancellation of Coal Mines, only 4 options (or a combination of these) of sourcing fuel are available
  - Linkage coal from CIL
  - Imported coal
  - E-auction coal
  - Coal from captive coal mines allocated through auction
- However, CIL is offering very few coal linkages and in future these linkages are proposed to be auctioned
- Quantity currently available in e-auctions is very small
- Import are costly and are subject to uncertainties related to sourcing and logistics chain
- ***Coal from captive coal mine shall ensure long term fuel security***

Coal Mine Auction – Power Sector

Coal Mine	Sch	GCV Range	Annual Prod (MT)	Successful Bidder	Closing Bid (Rs./ T)*
Amelia North	II	4900-5200	2.80	Jaiprakash Power Ventures Ltd	712
Sarisatolli	II	4000-4300	3.50	CESC Ltd	470
Talabira-I	II	3400-3700	3.00	GMR Chhattisgarh Energy Ltd	478
Tokisud North	II	4600-4900	2.32	Essar Power M.P. Ltd	1110
Trans Damodar	II	5500-5800	1.00	Durgapur Projects Ltd	940
Jitpur	III	3700-4000	2.50	Adani Power Ltd	302
Ganeshpur	III	4000-4300	4.00	GMR Chhattisgarh Energy Ltd	704
Mandakini**	III	4300-4600	7.50	Mandakini Exploration & Mining Ltd	650
Utkal-C**	III	3700-4000	3.37	Monnet Power Company Ltd	770

**Fixed Rate of Rs.100/tonne and Additional Premium; **Matter sub-judice*

- Aggressive bidding was witnessed in the auction of coal mines for power sector
  - Applicable Ceiling Price was **zero** for many mines
  - Negative bidding with Additional Premium ranging from Rs. **202**/tonne to Rs. **1010**/tonne for all mines

Possible Factors Leading to Aggressive Bidding

- Fuel Security
- Value of capital invested in the end-use plant and the potential loss due to lack of fuel
- Considerations on alternate fuel cost say imported coal, e-auction, coal linkage along with reliable fuel supply
- Reduced development risk since mines are either operating or near production
- Probable bid strategy: Bridging under recovery in fuel cost through
  - sale of 15% of the linked generation capacity on merchant basis
  - *quoting higher fixed capacity charge in the future Case-I bid PPAs*

Power Sector - Possibilities

- Power sector has two distinct type of Bidders
  - Bidders without existing PPAs
  - Bidders with existing PPAs

Coal Mine	EUP Capacity (MW) (A)	Linked Capacity (MW) (B)	Quantum of LT/MT PPAs required for capacity linked to coal block (MW) (C=85% of B)	Capacity with LT/ MT PPAs in the EUP (MW) (D)	% Capacity with LT/ MT PPA (D/A)
Amelia North	1320	568	483	495	38%
Sarisatolli	1225	710	604	1225	100%*
Talabira-I	1370	609	518	480	35%
Tokisud North	1200	471	400	420	35%
Trans Damodar	641	203	173	641	100%*
Jitpur	4620	507	431	3424	74%
Ganeshpur	1370	812	690	480	35%
Mandakini	2250	1522	1294	860	38%
Utkal-C	1050	684	581	704	67%

** Distribution Licensees*

Source: ICRA Research

Power Sector – Possibilities ..2

- Cost dynamics is different for both categories
- Successful Bidders having existing PPAs
  - The PPAs will be revised by the respective Regulatory Commissions (ERC) and pass –through of Variable Cost, wherever applicable will be for Final Price Offer quoted
  - Only downward revision in power tariff is permissible
- Successful Bidders without existing PPAs
  - They can participate in future tariff based competitive biddings
  - **However, ERCs may cap the Fixed Charge in future biddings**

Successful Bidders – Without Existing PPAs

- Can participate in future tariff based competitive biddings
  - ***However, limited Case-I bids in the last couple of years is a key concern***
- In order to ensure that the benefits of coal mines auction are passed on to the consumers, Ministry of Power vide its notification dated April 16, 2015 amended the guidelines for future procurement of power under DBFOO (Case-I) Bidding
- Bidders will be asked to quote energy charge and fixed charge separately as on Bid Due Date
- For subsequent years appropriate escalations shall be permitted as per the provisions of PPA or Tender Document
  - Fixed Rate (Rs. 100/tonne), Final Price Offer & Additional Premium to be escalated annually on the basis of pre-specified escalation formula that is prescribed in the new Standard Bidding Document for DBFOO as formulated by Ministry of Power for escalation of fuel cost from captive mines i.e. 30 per cent of the variation in WPI

Successful Bidders – Without Existing PPAs ..2

- As part of **energy charge** under medium/ long term PPAs, Successful Bidders will be able to recover only

Coal Cost

- Fixed Rate of Rs. 100/tonne
- Actual ROM quote by Successful Bidder (Rs./ tonne)

Transportation, Washing, Crushing Charge

- Procurer to specify benchmark rates in advance
- Benchmark rates shall not be higher than rates of CIL, Railway freight rates, any other benchmark specified by ERCs
- Lower of the benchmark rate or quoted rate to be considered

Royalty, Taxes and Duty

- As per prevalent laws

Negative Bidding means that the Successful Bidder would not be able to recover Additional Premium and Mining Cost as energy charge

Successful Bidders – Without Existing PPAs ..3

- Proposed **<u>capping of Fixed Charge</u> (FC)**
  - Power procurer shall determine, in consultation, with the Appropriate Commission, an upper ceiling in terms of per unit Fixed Charge.

- **Capping of Fixed Charge may inhibit the ability of the Successful Bidder (who is yet to tie-up capacity) to quote a higher FC so as to recover the under-recovery in energy charge**
- Bidders may be reluctant to proceed with the operations of coal mine on account of the uncertainty of coal cost recovery
- *For example, **Monnet Power Company Ltd** proposed to surrender the **Utkal-C** coal mine on account of the capping of FC. Matter is sub-judice.*
- *Further, **Mandakini Exploration and Mining Ltd**, who was declared as the Successful Bidder of **Mandakini** coal mine, approached court regarding this issue. Matter is sub-judice.*

- **If FC is capped then it may benefit Bidders having fully depreciated plants (FC in the range of about Rs 0.50 – 0.70 per unit)**
- Even if FC is capped in future bids, it can stay competitive if FC is to be capped at a higher value
- Bidders can benefit from allowed merchant sale (up to 15% of linked generation capacity)
- However, without PPA Bidders are mandatorily required to sell balance 85% coal to CIL

Successful Bidders – With Existing PPAs

- In order to ensure that the benefits of coal mines auction are passed on to the consumers, the following Clauses were stipulated in the Methodology published by Ministry of Coal (dated December 26, 2014)
  - For generation capacity having cost plus PPAs

"For the purpose of determining the fuel cost, the Appropriate Commission will allow bid price of coal along with subsequent escalation as provided in the coal block bid document as being equivalent to ROM cost of coal together with other allowable expenses and levies, provided that it shall not lead to higher energy charge throughout the tenure of the PPA than that which would have been obtained as per the terms and conditions of the existing PPA."

Successful Bidders – With Existing PPAs ..2

– For generation capacity contracted through Case-I bidding

"The Appropriate Commission shall review the quoted energy charge keeping in view the fact that the actual bid price of coal along with subsequent escalation as provided in the coal block bid document as being equivalent to ROM cost of coal along with statutory levies and other permissible components of energy charge, provided that such revision shall not lead to higher energy charge throughout the tenure of the PPA than that which would have been obtained as per the terms and conditions of the existing PPA. For this purpose the allocation of coal block under the new provisions shall be treated as "Change in Law" to enable the appropriate commission to revise the tariff downwards in accordance with the provisions of the PPA."

Successful Bidders – With Existing PPAs ..3

- Accordingly, it was stipulated in Clause 3.10.2 of the Tender Document,

"However the aggregate of (i) the Final Price Offer pursuant to which the Successful Bidder has received the Vesting Order; and (ii) the aforementioned Fixed Rate, will be the input for computation of energy charge for the purposes of determination of tariff for electricity.

It is clarified that in the event that an ascending forward auction is conducted in accordance with Clause 3.3.2 (c)(iv), only the aforementioned Fixed Rate of INR 100/Tonne, will be the input for computation of energy charge for the purposes of determination of tariff for electricity and the Additional Premium shall not be reckoned for the purposes of determination of tariff for electricity."

Successful Bidders – With Existing PPAs ..4

- MoP has issued a direction to CERC (dated April 16, 2015) for downward revision of tariff under already concluded PPAs where coal is being sourced from auctioned coal mines
  – CERC to review energy charge components: ROM cost, transportation cost, washery charge, crushing charge, royalty/ duties, levies etc; other charges
  – Basis of determination of these components shall be same as described for future Case-I bidding power procurement
  – Tariff revision shall not lead to higher energy charges and total tariff throughout the tenor of PPA than that which would have been obtained as per existing terms and conditions of the PPA

Successful Bidders – With Existing PPAs ..5

- Scenarios under existing Case-I bidding PPAs: Bidders have quoted
  - Fixed Charge and Variable Charge for first year; escalable annually
  - Fixed Charge and Variable Charge for each year
  - Non-escalable fixed and variable charge for each year and escalable fixed and variable charge
- However, the bidders did not quote individual components of the energy charge i.e. ROM cost, transportation, crushing, washing charges etc. were not quoted separately
- ***Hence, methodology of revision of energy charge under existing PPAs remains unclear***

Successful Bidders – With Existing PPAs ..6

- Scenario 1: PPA revised with Final Price Offer
  – Unit Size of 1000 MW assumed
  – Coal of GCV 4500 kcal/kg assumed
  – Additional premium assumed to be Rs 500/T
  – Coal cost for variable cost Rs 0 /T
  – Extraction cost of Rs 500/T & other cost of Rs 500/T
  – Out of above costs Rs 500/T will passed through in the tariff
  – Bidder will incur Additional Premium of Rs 500/T and extraction cost of Rs 500/T which shall not be passed through
  – This will effectively result in forgoing Rs 0.60 per unit in power tariff
  – Reduction in Variable Charge can be partly compensated by foregoing ROE

How to treat “Capital Costs”

- Upfront Payment includes payments for land and mine infrastructure.
- It also includes costs of obtaining clearances and GR
- Further expenditure on land and equipment may be necessary, especially in case of Schedule III mines
- For new PPAs, Bidder may be able to include these as capital costs
- For existing PPAs, the situation is not clear
- Also, it is not clear whether the ERCs will take this cost into account while “capping” the capital costs
- Clarity is also required as to how JVs will be treated

Potential Positives

- A number of Bidders had fully depreciated plants with very low fixed cost (in the range of about Rs 0.50 per unit to 1.00 per unit)
  - Such Bidders are better placed to absorb additional coal cost
- A number of Bidders are also into distribution of power dependent solely on existing plants for supplying electricity in their area.
  - In absence of alternate long term sources of coal, such bidders are dependent on own coal mines for supply of coal.
- Bidders without existing PPAs and dependent on imported coal have alternate source of coal at competitive rate
  - These bidders can also benefit from merchant sale of electricity.
- Some Bidders have got the mine so as to bundle it with their existing power plants
  - Allowed coal entitlement is 150% of coal requirement of the plants. It will enable Bidders to set up expansion plants in future.

Impact of Coal Mines Auction on Power Sector

Conclusion

- Reverse bidding methodology was followed with the objective of minimizing tariff
- Negative bidding for all the coal blocks; may be attributed to importance of fuel supply security to the bidders
- Significant under-recovery on account of non-recovery of Additional Premium and Mining Cost as energy charge;
  - Merchant realizations may help bridge some of the under-recovery
  - Efficient mining and cost control are key to viable commercial operations
- Further clarity on methodology for revision of tariff under existing PPAs is awaited
- Clarity on treatment of expenditure incurred in the nature of capital costs is also awaited
- State distribution utilities to benefit from Negative Price Bids in the coal mine auction
  - Power variable cost is estimated to reduce by around Rs. 97000 crore (over 30 year period)

Conclusion 2

- In a developing economy like India, under the present environment, any natural resource allocation to private parties will invite close scrutiny
- Whether we like it or not, auction process is here to stay
- Problem is not with the process but irrational strategy of the bidders
- It is expected that as the market matures, so will be the participants
- In the interim, steep penalties as deterrent is the only solution

Thank You