

COMPETITIVE BIDDING FRAMEWORK IN INDIA



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Integrated Research and
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South Asia Regional Initiative for Energy Integration

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PRESENTATION OUTLINE

- **COMPETITIVE BIDDING - CASE 1 AND CASE 2**
- **KEY PROVISIONS OF A PPA**
- **CHALLENGES OF COMPETITIVELY BID TARIFFS**
- **TYPICAL POWER SUPPLY AGREEMENT ON DBFOO BASIS**

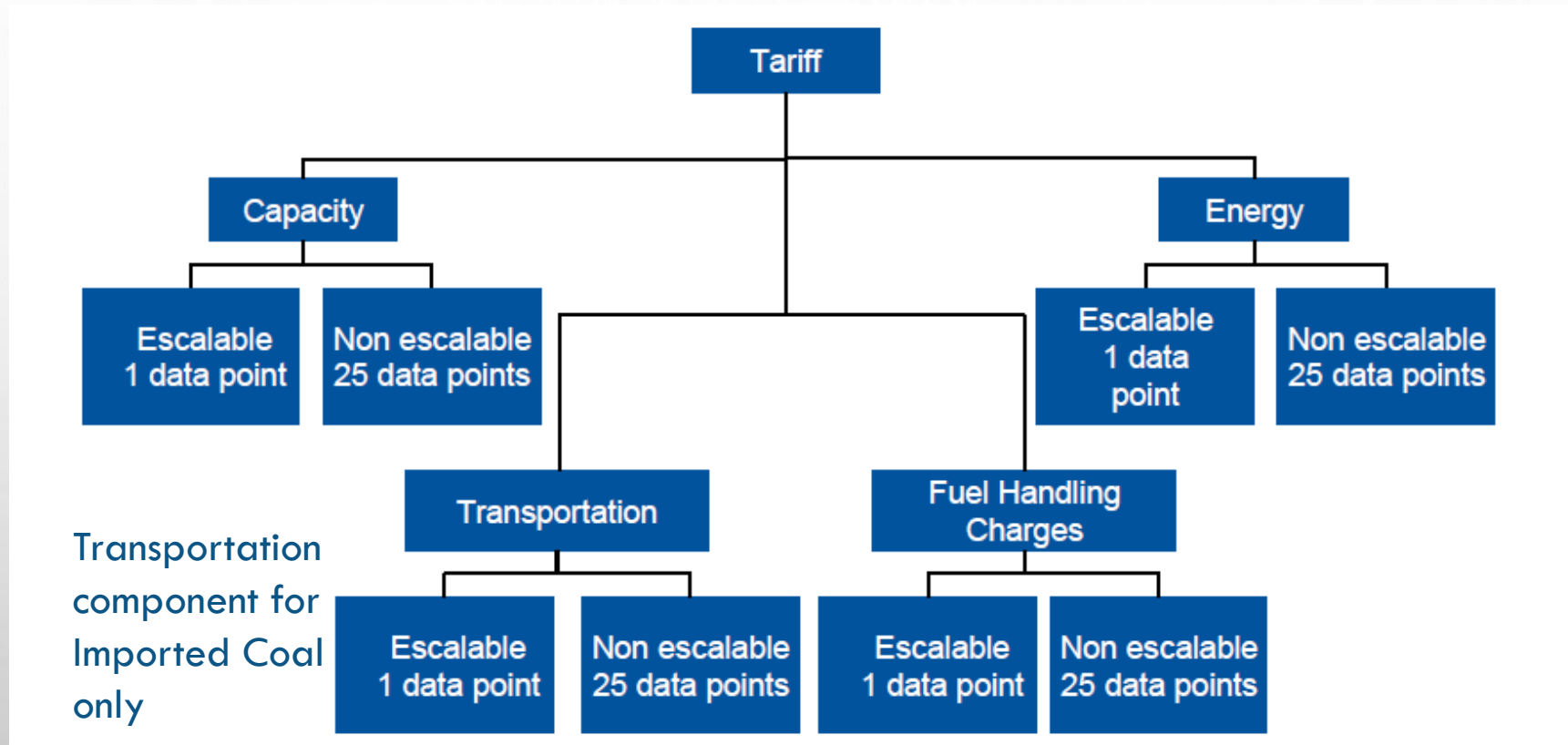
COMPETITIVE BIDDING - CASE 1 AND CASE 2

CASE-1 AND CASE-2 BIDDING

- IN CASE-1 BIDDING, THE DEVELOPER DECIDES THE LOCATION, TECHNOLOGY AND FUEL FOR THE PROJECT
- DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL CLEARANCES AND APPROVALS
- IN CASE-2 BIDDING, THE LOCATION AND FUEL ARE PRE-DECIDED. THE BIDDER CAN CHOOSE THE TECHNOLOGY.
- FOR ULTRA MEGA POWER PROJECTS (UMPPs), WHICH ARE ALSO CASE-2, MAIN PLANT EQUIPMENT HAS TO BE PROCURED FROM DOMESTIC MANUFACTURERS ONLY
- THE HOST STATE TAKES PRIME RESPONSIBILITY FOR LAND ACQUISITION, WATER ALLOCATION, FIRST STAGE CLEARANCES AND FUEL ARRANGEMENT

PROCESSES UNDER BOTH CASES ARE ESSENTIALLY SIMILAR AND KEEP EVOLVING

OLD CASE-1, CASE-2 STRUCTURE



THERE WAS OPPORTUNITY TO QUOTE DISTINCT TARIFF COMPONENT NUMBERS FOR 25 YEARS

NEW CASE-1, CASE-2 STRUCTURE

- BASE FIXED CHARGE TO BE QUOTED
- COST OF FUEL, TRANSPORTATION AND WASHING TO BE QUOTED SEPARATELY
- TRANSMISSION COSTS TO BE QUOTED (FOR CASE-1)
- SUM OF THE ABOVE TO BE EVALUATED
- FIXED CHARGE TO BE REDUCED BY 2% EACH YEAR, FURTHER CORRECTED BY 30% OF VARIATION IN WPI

SIMPLIFIED PROCESS, AMPLIFIED RISK ?



KEY PROVISIONS OF A PPA

KEY PROVISIONS OF A PPA

- PROJECT LOCATION / POINT OF DELIVERY OF POWER
- FUEL (S), FUEL SOURCE (S)
- ANTICIPATED FINANCIAL CLOSE, SUPPLY START DATE
- AVAILABLE CAPACITY / CONTRACTED CAPACITY / PERIOD OF SUPPLY
- CONDITIONS PRECEDENT, CONDITIONS SUBSEQUENT
- NORMATIVE PARAMETERS FOR SUPPLY
- TESTING, METERING, ENERGY ACCOUNTING

FOCUS ON SHARE OF CAPACITY, SUPPLY PROFILE

KEY PROVISIONS OF A PPA (CONTD.)

- TARIFF, COMPONENTS, PASS THROUGH
- PRICING OF FUEL, PRICING OF ADDITIONAL FUEL
- FORCE MAJEURE, CHANGE IN LAW
- TRANSMISSION RISK – COMMISSIONING, OPERATIONS
- PAYMENT SECURITY MECHANISM
- KEY EVENTS OF DEFAULT, DISPUTE RESOLUTION MECHANISM
- PENALTIES FOR DELAY AND FOR PPA TERMINATION

FOCUS ON ESTIMATING RISK PROFILE, TREATMENT OF RISK

CHALLENGES OF COMPETITIVELY BID TARIFFS

MANY CASES BEFORE REGULATORS

- CERC (CENTRAL ELECTRICITY REGULATORY COMMISSION)
 - PROJECTS WITH MULTIPLE BUYERS, ONE TARIFF (UMPPs)
 - SINGLE PROJECT WITH MULTIPLE TARIFFS (ADANI MUNDRA)
 - SINGLE PROJECT WITH PARTIAL COST-PLUS AND PARTIAL BID TARIFF (GMR)
- SERCs (STATE ELECTRICITY REGULATORY COMMISSIONS)
 - MAHARASHTRA – INDIABULLS, ADANI, JSW – COMPENSATORY TARIFF
 - HARYANA – GMR , LANCO AMARKANTAK – TRADER PPA
 - GUJARAT – GAS PROJECTS – NO FUEL
 - RAJASTHAN – DISPUTE ON BID PROCESS

COMPETITIVE BIDDING FRAMEWORK IS BEING CONSTANTLY TESTED

CASES REGARDING CAPACITY CHARGE

- FORCE MAJEURE
 - ENVIRONMENT CLEARANCE ISSUES (PROJECT, COAL MINE)
 - LAND ACQUISITION / COMPENSATION ISSUES
- CHANGE IN LAW
 - NEW LAND ACQUISITION LAW
 - MEGA POWER POLICY – BGs
- UNPRECEDENTED CHANGE IN MACRO-ECONOMIC FACTORS
 - RUPEE DEPRECIATION, HEDGING COSTS, INTEREST RATES
- DELAY IN LOAN DISBURSEMENT ON ACCOUNT OF ABOVE FACTORS
- FUEL AVAILABILITY AND PRICING ISSUES

CASCADING IMPACTS OF STRESS FACTORS, COST COMPONENTS OPAQUE

CASES REGARDING FUEL CHARGE

IMPORTED COAL

- IN 2008, BIDDERS IN MORE THAN ONE BID PROCESS ASSUMED BASE COAL PRICE OF 32 – 35 USD/TONNE IN THEIR BIDS FOR SUPPLY FROM 2011/12
- SOME FACTORED ABOUT 50% ENERGY CHARGE AS ESCALABLE, SOME HAD QUOTED FIRM NUMBERS FOR 25 YEARS
- INDONESIA INTRODUCED NEW LAW ON BENCHMARK PRICES FOR COAL IN 2010, COAL PRICE WENT UP TO USD 90

DOMESTIC COAL

- BIDS WERE BASED ON COAL SUPPLY AT ADMINISTERED PRICES OR COAL BLOCKS ALLOTTED BY GOVERNMENT
- COAL SUPPLIES BECAME INADEQUATE, COAL BLOCK ALLOTMENTS WERE CANCELLED, ALTERNATIVE SOURCES WERE MUCH MORE EXPENSIVE

MANY EVENTS TAKE THE MARKET BY SURPRISE

POWERS TO RESOLVE DISPUTES IN COMPETITIVELY BID TARIFF

- BIDDERS ARGUED THAT ELECTRICITY ACT GRANTS POWER TO REGULATORS TO “REGULATE” TARIFF, WHICH APPLIES UNIVERSALLY WHETHER TARIFF IS NEGOTIATED OR COMPETITIVELY BID
- BUYERS OPPOSED THIS CONTENTION; REGULATOR HAS TO “ADOPT” THE TARIFF THAT COMES FROM COMPETITIVE BIDDING
- CERC / APPELLATE TRIBUNAL RULED THAT THE POWER TO REGULATE TARIFF WILL ALSO EXTEND TO COMPETITIVE BIDDING
- THE DELICATENESS OF RETAINING THE SANCTITY OF COMPETITIVE BIDDING WHILE PROVIDING ADJUSTMENT IN TARIFF IS PROVING VERY CHALLENGING

THIS IS OPENING A NEW CHAPTER IN REGULATORY POWERS

**Typical provisions in a Power Supply Agreement
for Long-term Procurement of Electricity
from a Power Station set up on
Design, Build, Finance, Own and Operate (DBFOO) basis**

Provisions in a typical PPA

- Recitals / Preamble
- Scope of the Project
- Initial term period and extensions
- [Conditions Precedent](#) for full effectiveness of PPA
- Obligations of the Supplier
- Obligations of the Utility (Buyer)
- Representations and Warranties of each Party
- Performance Security
- Financial Close

Provisions in a typical PPA (Contd.)

- Obligations in respect of Construction, Monitoring of Construction
- Certification of Construction Completion
- [Testing](#) and Commencement of Commercial Operations
- Operation & Maintenance, its Monitoring, Key Performance Indicators
- Allocation of Capacity, Despatch of Contracted Capacity
- [Tariff](#) and Payment Security, Accounts and audit
- Treatment of impact of [Change in Law](#)
- Insurance
- [Force Majeure](#)

Provisions in a typical PPA (Contd.)

- Compensation for Breach of Agreement
- Defaults and [Termination](#)
- Assignment and Charges
- Liability and Indemnity
- Dispute Resolution
- Relief for [Unforeseen Events](#)
- Disclosure to Third Parties
- Miscellaneous (Governing law, Jurisdiction, Successors & Assigns, Notices)
- Definitions

Provisions in a typical PPA (Contd.)

Schedules

- Site of the Project
- Broad details of the Power Station, Dedicated Transmission System
- Specifications and Standards
- Project Completion Schedule, including milestones
- Tests, including time schedule
- Format of Completion Certificate
- Maintenance Requirements
- Terms of Reference for Utility's (Buyer's) Representative



Provisions in a typical PPA (Contd.)

Schedules (Contd.)

- Format of Performance Security (Bank Guarantee)
- Format of Default Escrow Agreement
- Format of Deed of Hypothecation
- Format of Letter of Credit
- Panel of Chartered Accountants
- Substitution Agreement

The background is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text 'THANK YOU' is centered in the middle of the image.

THANK YOU



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CONDITIONS PRECEDENT



- Conditions Precedent (CPs) required to be satisfied by the **Utility** :
 - execution of the Default Escrow Agreement and Deed of Hypothecation
 - procure approval of the Regulatory Commission for payment of Tariff
- Conditions Precedent to be satisfied by the **Supplier** :
 - provide Performance Security to the Utility
 - procure execution of the Substitution Agreement
 - execute the Fuel Supply Agreement/ necessary Agreements for Coal Mine/Blocks
 - execute the Financing Agreements and deliver copies to the Utility

Necessary conditions for the contract to become effective

CONDITIONS PRECEDENT (Contd.)



Conditions Precedent to be satisfied by the **Supplier** (Contd.)

- deliver soft copies of the Financial Model (adopted by Senior Lenders*) to the Utility
- acquire the real estate for the Power Station
- procure 'in principle' approval for forest clearance in respect of Coal Mine/Blocks
- submit evidence of commissioning of the Power Station (*only if power station is to get commissioned shortly after PPA signing and power purchase is to start immediately thereafter*)

The Utility may grant any waiver of such conditions as it may deem fit

* (**“Senior Lenders”** means the financial institutions etc. who have agreed to guarantee or provide finance to the Supplier for meeting all or any part of the Total Project Cost and **who hold pari passu charge** on the assets, rights, title and interests of the Supplier)

Contract may become infructuous if conditions not satisfied

TESTING, COMPLETION CERTIFICATE



- At least 30 days notice of likely synchronisation of the Power Station to the Grid by the Supplier to the Utility/Utility's Representative and the RLDC* / SLDC*
- Supplier to undertake statutory tests through an independent third party Agency/Engineer
- “**Completion Certificate**” / “Provisional Certificate” to be issued to the Utility upon completion of Construction Works and Supplier determining the Tests to be successful
- Tests must establish Heat Rate is not exceeding the specified Station Heat Rate by up to 2%
- Incomplete Works, including any shortfall in Contracted Capacity or Station Heat Rate, to be completed within 180 days. For further delay, Damages for each day at the lower of 0.1% of the Performance Security and 0.2% of the cost of completing such items as estimated by the Utility's Representative

*RLDC/SLDC – Regional / State Load Despatch Centre

Lays down the procedure for declaring Project Completion

TARIFF



Comprises **Fixed Charge** and **Fuel Charge**

- **Fixed Charge** for Availability of the Power Station to the extent of Normative Availability
- **Fuel Charge** for cost of fuel to the extent the power station output is requisitioned by the Utility
- **Taxes and duties**
 - Tariff is usually inclusive of all taxes and duties, except as specified
 - Service Tax, Electricity Duty, Value Added Tax or General Sales Tax, Custom Duty on Fuel are reimbursed by the Utility upon submission of necessary particulars by the Supplier

Disputes often arise if treatment of Taxes & Duties lacks clarity in the PPA

TARIFF (Contd.)



Fixed Charge

- **Fixed Charge** for Availability of the Power Station to the extent of Normative Availability
- **Base Fixed Charge** - as per bid, for the first year when supply commences. To be increased by 1.5% for every improvement of 1% of tested Station Heat Rate as compared to specified heat rate. To be decreased by 2% for every increase of 1% of tested Station Heat Rate as compared to specified heat rate
- For each subsequent Accounting Year, Base Fixed Charge to be 98% of immediately preceding Accounting Year
- **Indexation** - Base Fixed Charge to be revised annually to reflect 30% of the variation in WPI

So, if (a) the Bid Date occurs in February 2015; (b) COD occurs in May 2019; and (c) WPI increases by 20% between January 31, 2015 and January 31, 2019, the Indexed Fixed Charge for the Accounting Year commencing from April 1, 2019 shall be 106% of the Base Fixed Charge for that Accounting Year

Older PPAs had provisions for discrete Fixed Charge numbers for each year

TARIFF (Contd.)



Incentive and Damages for Availability

- Fixed Charges are payable in proportion to the availability actually achieved, upto a maximum of the Normative Availability (90%)
- If the Availability in any month exceeds Normative Availability, the Supplier shall be entitled to Incentive at the rate of 50 % of the Fixed Charge for Availability > 90% to the extent of actual Despatch
- If the Availability in any month is less than the Normative Availability, and goes below 85%, the Supplier shall pay Damages at the rate of 25 % of the Fixed Charge for Availability < 85%, besides pro-rata reduction of Fixed Charge
- Incentives or Damages shall be averaged and adjusted within each Accounting Year

Such incentives and damages seek to further ensure high plant availability levels

TARIFF (Contd.)



Treatment of Fuel Cost Components

- The cost of Fuel from additional domestic sources shall be the lower of (i) the current price of similar Fuel sold by {Coal India Ltd.} through e-auction or any substitute thereof and (ii) actual cost of procurement
- The price of Fuel from Captive Mine/Blocks for the first year of operations shall be as specified in the Bid. Such price to be increased for every subsequent Accounting Year at a compounded annual rate of 2%, and further revised annually to reflect 60% of the variation in WPI (Jan 31 reference date) from the Bid year and the Accounting Year
- Domestic Coal transportation cost capped at 110% of the railway freight rate
- Cost of coal washing capped at average cost of washing incurred by {Coal India Ltd.} for similar washing
- Weighted average Gross Calorific Value (GCV) of coal received during any month at the Power Station to be used for calculations
- If coal supplier certifies a GCV band, the mean value to be reckoned

Capping of cost components is to encourage full diligence by the Supplier

TARIFF (Contd.)



- **Fuel Supply Agreement or FSA** - Prior to the Appointed Date (satisfaction of Conditions Precedent), Supplier to have executed an agreement (for at least 15 years) for supply of fuel for no less than 75% of the Contracted Capacity each month or shall have executed arrangements for Coal Mine/Blocks
- **Use of Concessional Fuel for Buyers** - Use of Concessional Fuel in breach of the Agreement to attract Damages equal to the higher of twice the Fixed Charge and the entire sale revenue accrued from other buyers
- **Minimum Fuel Stock** - Minimum stock of Concessional Fuel and Fuel from Additional FSA (if any) sufficient for Contracted Capacity for 7 days to be maintained (“**Minimum Fuel Stock**”)
- **Additional Fuel Supply Arrangement or “AFSA”** - In the event of fuel shortage, Supplier to make best efforts to identify additional source(s) of fuel supply and transportation. Supplier to procure fuel under AFSA only with prior approval of the Utility and such costs to be passed through

Providing for commercial implications of an alternative source of fuel is always useful in a PPA

FORCE MAJEURE



“**Force Majeure**” or “**Force Majeure Event**” (FM) means occurrence in {India} of a Non-Political Event, Indirect Political Event and Political Event, if it affects the performance by :

- An act or event beyond the reasonable control of a party to the contract
- The affected party could not have prevented or overcome by exercise of due diligence and following Good Industry Practice
- The act or event has Material Adverse Effect on the Affected Party

The Party claiming the benefit of Force Majeure with regard to its inability to fulfil its obligations under a contract is defined as the “**Affected Party**”

FM relieves the parties from performing their contractual obligations when certain circumstances beyond their control arise.

Courts tend to interpret force majeure clauses narrowly



"Sorry, Jeremy, Force Majeure is an unacceptable excuse for not having your homework done."

FORCE MAJEURE (Contd.)



Non-Political Event

- act of God, epidemic, extremely adverse weather conditions
- strikes or boycotts
- order of any court of competent jurisdiction or statutory authority
- discovery of unexpected geological conditions, toxic contamination or archaeological remains on the Station Premises

Indirect Political Event

- an act of war, riot, terrorist or military action, civil commotion or politically motivated sabotage
- political or economic upheaval
- industry-wide or State-wide strikes

Obstructions caused by the acts or omissions of the affected party are not accepted as FM

FORCE MAJEURE (Contd.)



Political Event - Acts or events by or on account of a Government Instrumentality:

- Change in Law, if consequences cannot be dealt with under the PPA
- compulsory acquisition or expropriation of Project Assets or rights
- unlawful / unauthorised revocation / refusal to renew / grant without valid cause, any clearance, licence, permit, authorization etc. required by Supplier / Contractor

Force Majeure Costs attributable to a Political Event shall be reimbursed by the Utility to the Supplier. These may include interest payments on debt, O&M Expenses and all other costs directly attributable to the Force Majeure Event, but shall not include loss of Tariff or debt repayment obligations.

These are particularly relevant where the buyer is a government entity

CHANGE IN LAW



“Change in Law” means occurrence of any of the following after the Bid Date*
:

- enactment of any new {Indian} law
- repeal, modification or re-enactment of any existing {Indian} law
- commencement of any (Indian) law which has not entered into effect until the Bid Date*
- change in the interpretation or application of any {Indian} law by a judgement of a court of record which has become final, conclusive and binding, as compared to such interpretation or application by a court of record prior to the Bid Date* or
- change in the rates of any of the Taxes that have a direct effect on the Project

(*or after the date of signing a negotiated PPA)

This is a crucial provision in a long term contract

RELIEF FOR UNFORESEEN EVENTS



- An “**Unforeseen Event**” is one which could not have been foreseen by a prudent and diligent person
- Upon occurrence of an “**Unforeseen Event**”, the Parties shall constitute a 3 member conciliation tribunal
- Tribunal to comprise one member each to be nominated by both Parties from among persons who have been Judges of a High Court
- Such conciliators shall choose a chairperson who has been a Judge of the Supreme Court or Chief Justice of a High Court

This is a new provision triggered by major contractual difficulties faced in recent years

TERMINATION OF THE AGREEMENT



Termination for Supplier Default

- Performance Security not replenished within 15 days
- Not achieving Condition Precedent or curing Supplier Default for which Performance Security may have been appropriated, within 120 days
- Not achieving the latest outstanding Project Milestone or the Scheduled Completion Date, for 180 days
- Use of Concessional Fuel in breach of the Agreement and failing to pay Damages
- Supplier creates any Encumbrance in breach of the Agreement;
- Repudiation of the Agreement
- Failing to achieve monthly Availability of 70% for 6 consecutive months or for a cumulative period of 6 months within any continuous period of 18 months, except for shortfall in Minimum Fuel Stock not attributable to the Supplier
- If share of Equity of promoters + Associates falls less than 26% of total Equity before completion of ten years after COD

Termination provisions are more like deterrents or a “Red Card” in soccer

TERMINATION OF THE AGREEMENT (Contd.)



Termination Payment

- For Supplier Default, Termination Payment of Fixed Charge for a period of 1 year
- For Utility Default, Termination Payment of Fixed Charge for a period of 6 months
- Termination Payment shall be due and payable within 15 days

Termination penalties need to be large enough to deter default, small enough to be recoverable