



ERERA

FORUM 2012

ARREC



November 20 - 21 Novembre

Dakar - Senegal

LEGAL AND FINANCIAL ARRANGEMENTS OF AN IPP

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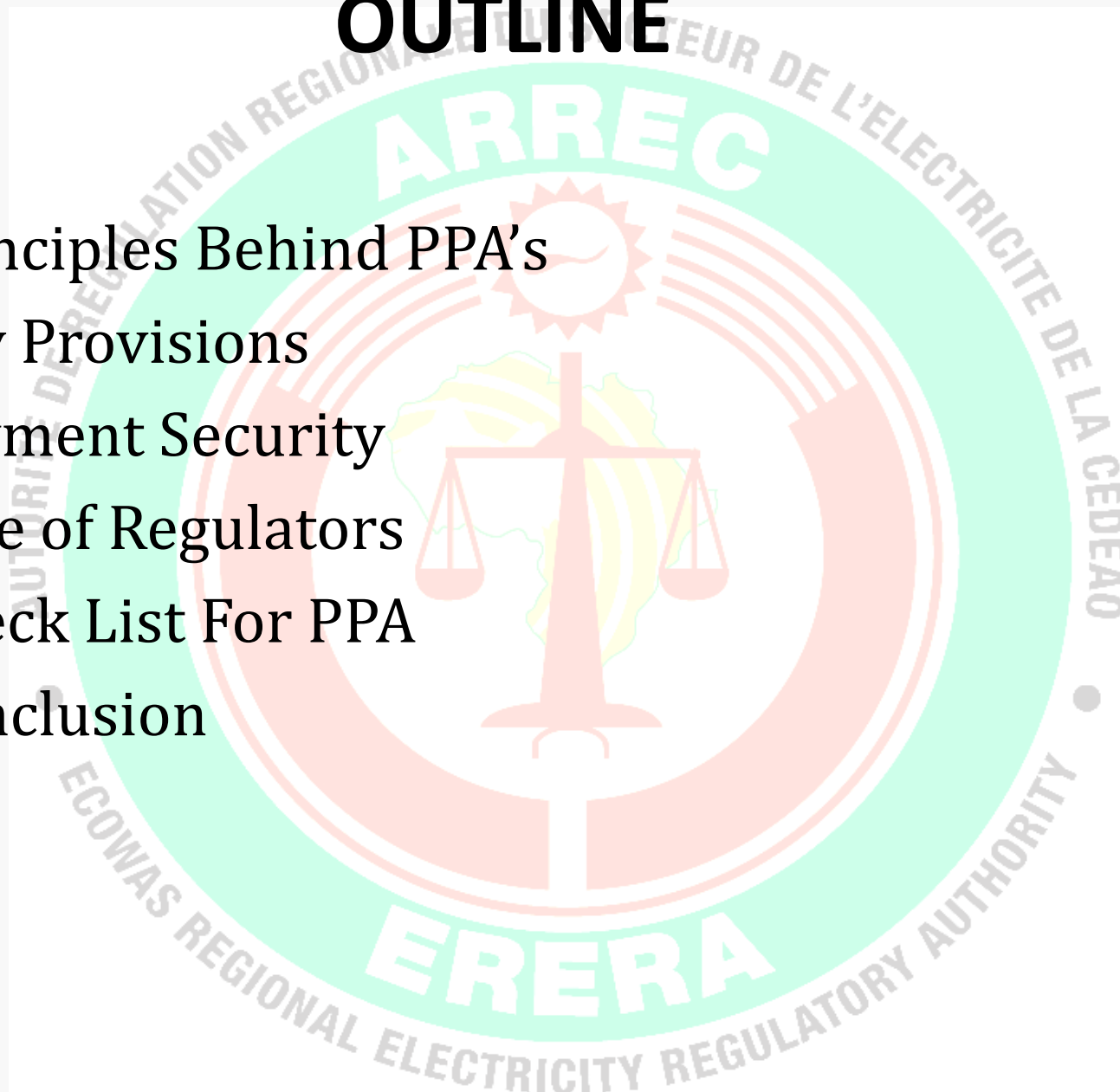
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Outline

- About the Faciliator
- Introduction
- Nature of Power Purchase Agreements
- Outline of PPA's
- Parties in a PPA
- Role of Parties
- PPA Structuring Pitfalls
- Structure and Description of Power Projects

OUTLINE

- Principles Behind PPA's
- Key Provisions
- Payment Security
- Role of Regulators
- Check List For PPA
- Conclusion



Introduction

- Power Purchase Agreements are more a financing document than legal document
- They are off-take agreements for power plants.
- They are usually signed between the producer of the power and what is known as off-taker.
- The off-take may be a user of the power, a reseller or just a middleman

LEGAL AND COMMERCIAL STRUCTURE FOR IPPs

Tolling Agreements vs Power Purchase Agreements

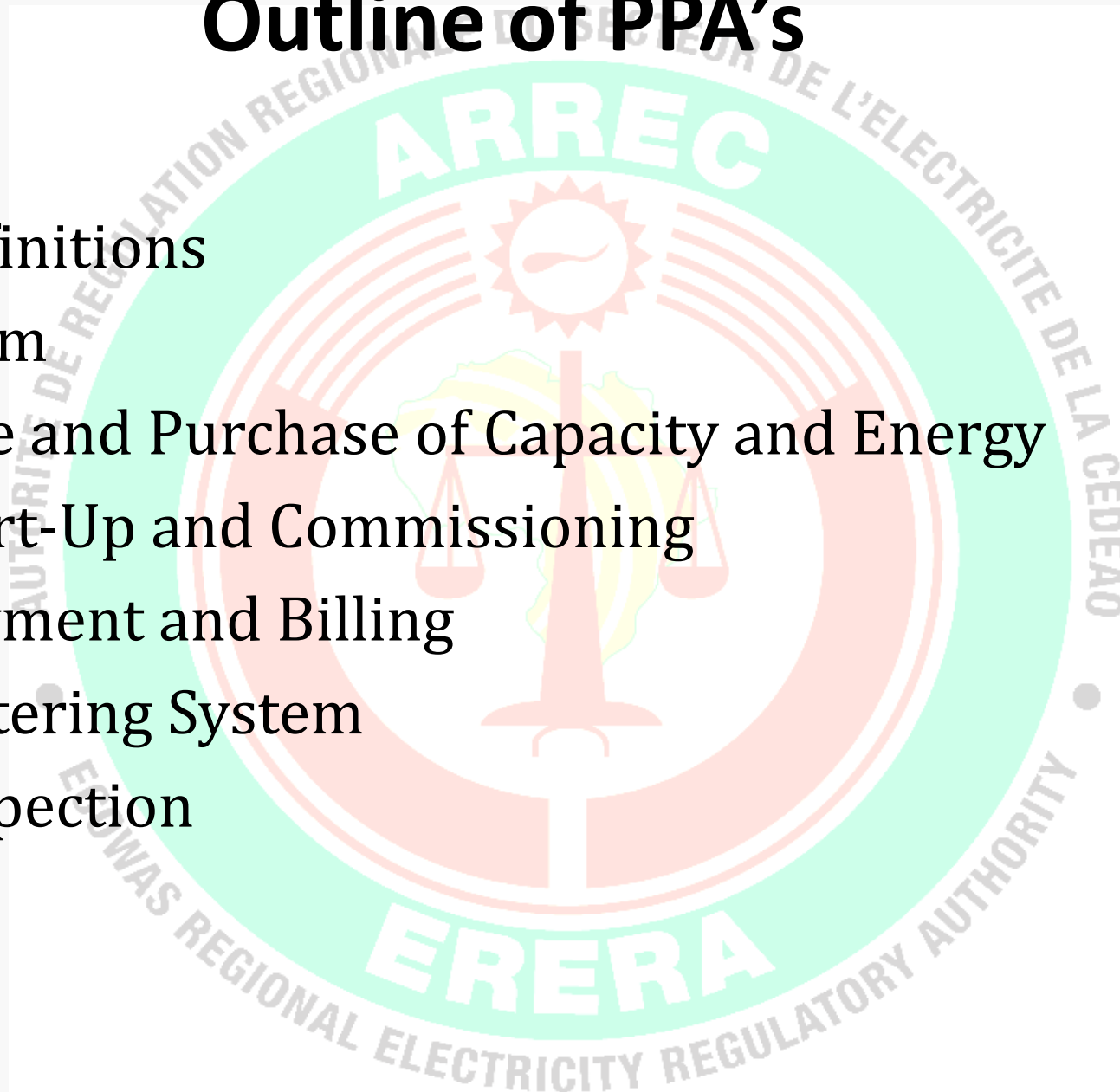
- In PPAs the IPP developer is responsible for fuel supply and assumes the risk
- In Tolling agreements the Purchaser is also the fuel supplier, he is actually buying the services of converting fuel into electric energy.
- In Tolling agreements IPP developer is charging a toll for allowing the purchasers fuel pass through his plant.
- In traditional PPAs the buy is not concerned with Heat Rate so long as the contracted output is delivered

Nature of Power Purchase Agreements (PPA)

- Critical to the bankability of the Project
- Key to its stability and predictability of revenue stream
- Represents a commitment sufficient to repay loans.
- Usually links all key parties; equity, lenders, off taker and supplier of energy
- Typically negotiated prior to obtaining financing

Outline of PPA's

- Definitions
- Term
- Sale and Purchase of Capacity and Energy
- Start-Up and Commissioning
- Payment and Billing
- Metering System
- Inspection



Outline of PPA's

- Force Majeure
- Events of Default
- Termination and Remedies
- Representations and Warranties
- Insurance
- Dispute Resolution
- Tariff Schedules

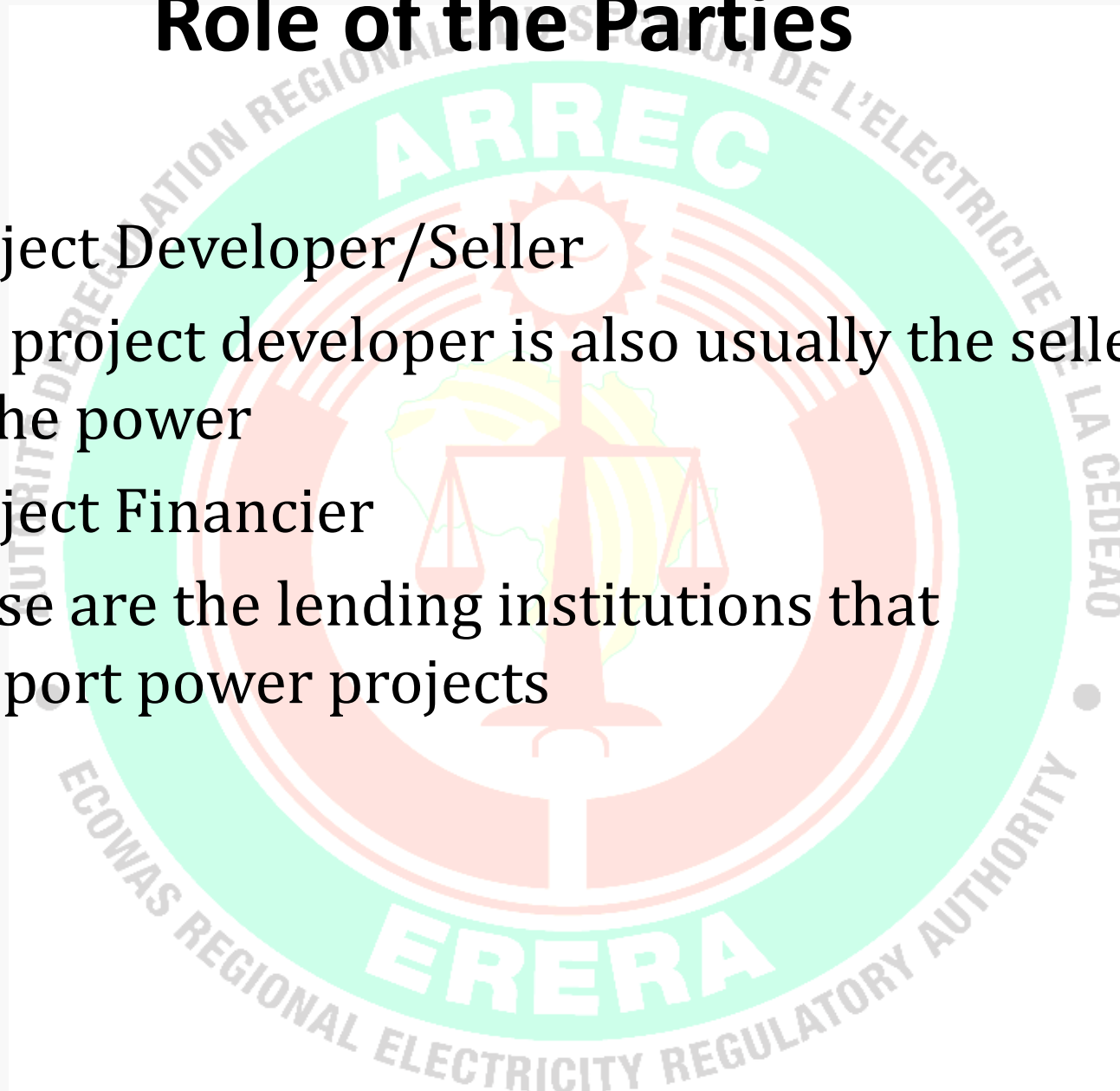
Parties in a PPA

- Direct Parties
 - Seller
 - Buyer
- Indirect Parties
 - Financier/Lenders
 - Government
 - Transmission services



Role of the Parties

- Project Developer/Seller
 - The project developer is also usually the seller of the power
- Project Financier
 - These are the lending institutions that support power projects



Role of the Parties

- Owner of Project
 - The owner of a project may be different from the project developer.
- Off Taker
 - Off Taker is the guaranteed purchaser of the power.
- Government (Sometimes depending on the circumstance may be a guarantor of the off taker)

PPA Structuring Pitfalls

- PPA price and escalation rate above industry standard.
- No deadline/penalties for completion.
- Technology/materials not clearly specified.
- Requires agency to pay for “estimates” of energy produced.
- Capacity tests are annual and with no consequence for failure to provide declared capacity.

PPA Structuring Pitfalls

- No penalty/default for underperformance of System.
- Public agency payment of tax, insurance or other costs.
- Completion date of the plant not addressed.
- Requires off-taker to purchase plant at end of term at pre-determined price.
- Passes through cost not related to the project

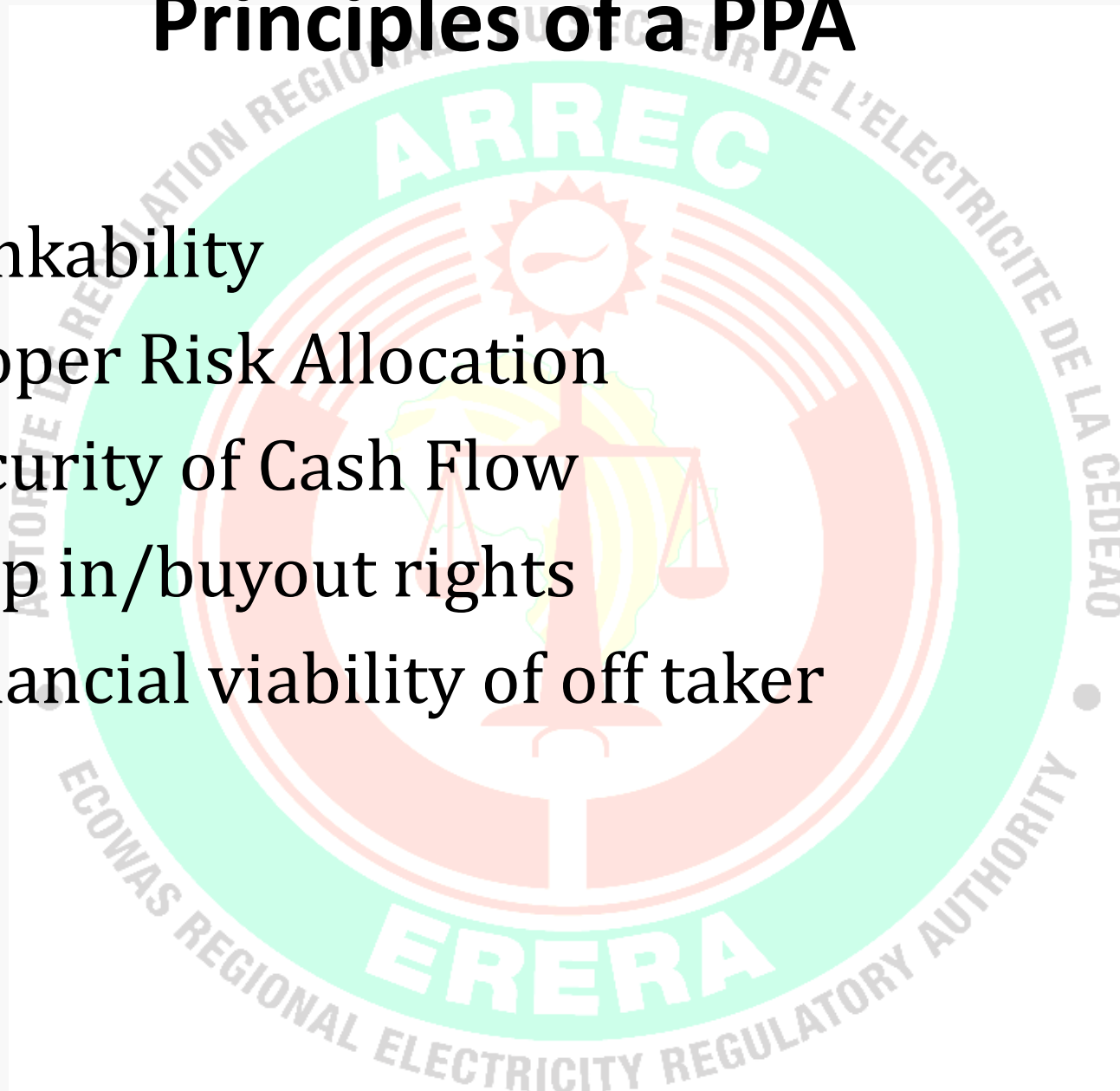
Description of Projects

- Power Projects May Be
 - BOO
 - BOT
 - ROT



Principles of a PPA

- Bankability
- Proper Risk Allocation
- Security of Cash Flow
- Step in/buyout rights
- Financial viability of off taker



Key Provisions in PPA

TERM

- 10 – 30 years from commercial operations is usual for PPA's
- Lenders and project promoters try to structure term of agreements to ensure that debt and equity can be repaid prior to termination of the PPA.

Key Provisions Cont'

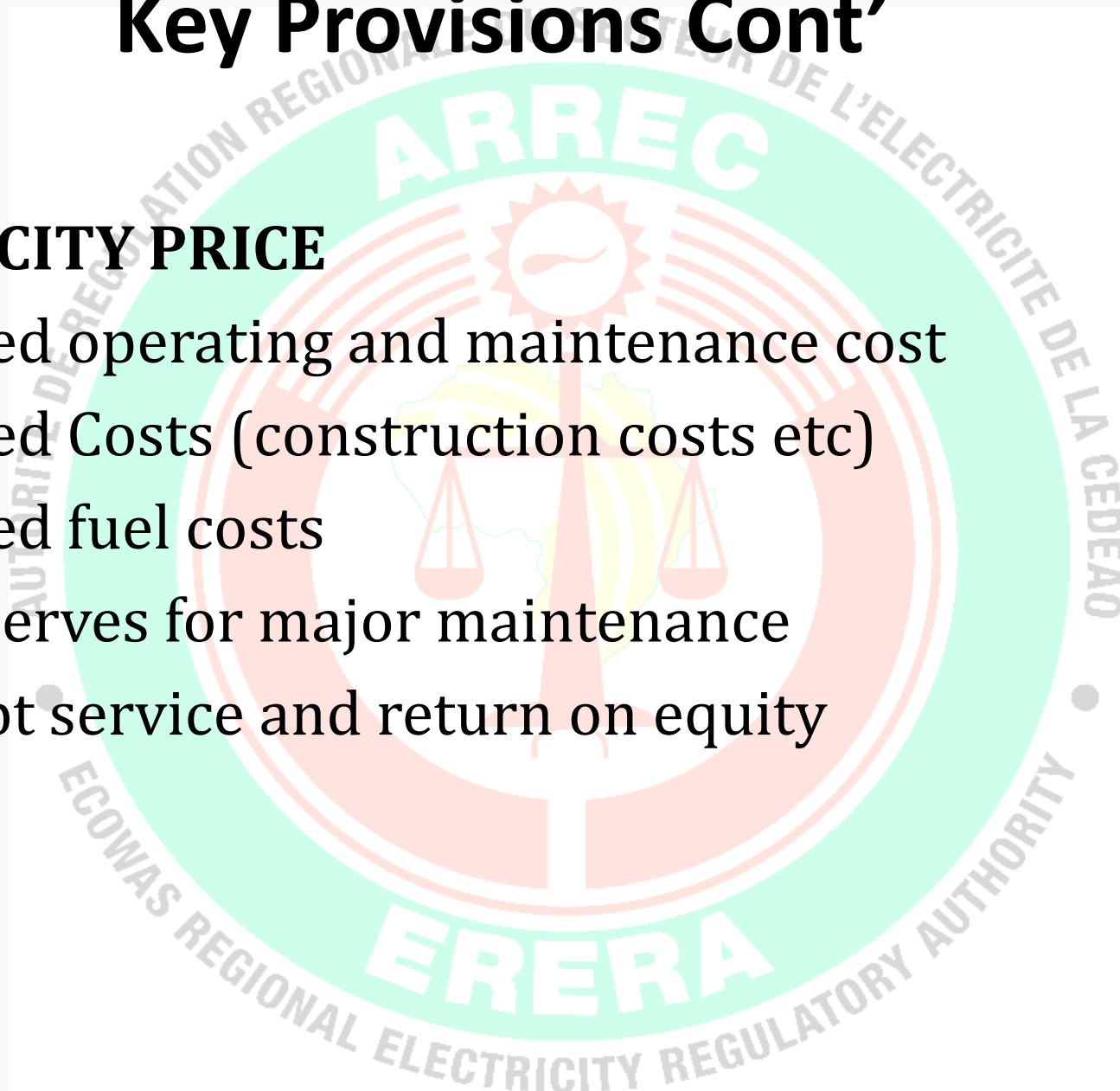
TARIFF

- The pricing formulae covers all the cost component of the project.
- Two part tariffs are usual in PPA's, namely; Capacity Price and Energy Payments.
- Tariffs as usually structured in a pass through framework
- Indexation is critical in tariff design and structure
- Escalation formulae needs to be clear

Key Provisions Cont'

CAPACITY PRICE

- Fixed operating and maintenance cost
- Fixed Costs (construction costs etc)
- Fixed fuel costs
- Reserves for major maintenance
- Debt service and return on equity



Key Provisions Cont'

ENERGY PAYMENTS

- Variable expenses
- -Variable O & M
- Maintenance expenses
- Fuel expenses
- Other Pass through costs

Other Charges

- Start up charges
- Supplemental payments

Key Provisions Cont'

Billing and Payments

- Should be consistent with the schedule for payments under the loan agreements, O & M and fuel supply.
- Should set out procedure for billing and payments
- Should allow for reasonable time to present and process invoice.
- Interest for late payment should be negotiated and fixed at reasonable commercial prevailing rates.

Key Provisions Cont'

Events of Default

- Buyers Events of Default
- Sellers Events of Default
- Cure periods for defaults that are curable
- Step in by off takers to remedy
- Lenders Step in rights

Key Provisions Cont'

Force Majeure

- There is usually a distinction between political force majeure and commercial force majeure. Commercial force majeure is usually insurable, whilst there is limited coverage for political force majeure.
- Ensure that force majeure provisions are consistent with industry standard and

Milestones

Commencement of Operations

- IPP must be technically and economically feasible.
- Lenders want assurance that developer has the financial and technical capacity to comply with deadlines.
- PPA should contain flexibility to accommodate possible delays.
- lenders want a cushion to allow correction of any defects or slippages in EPC delivery dates.

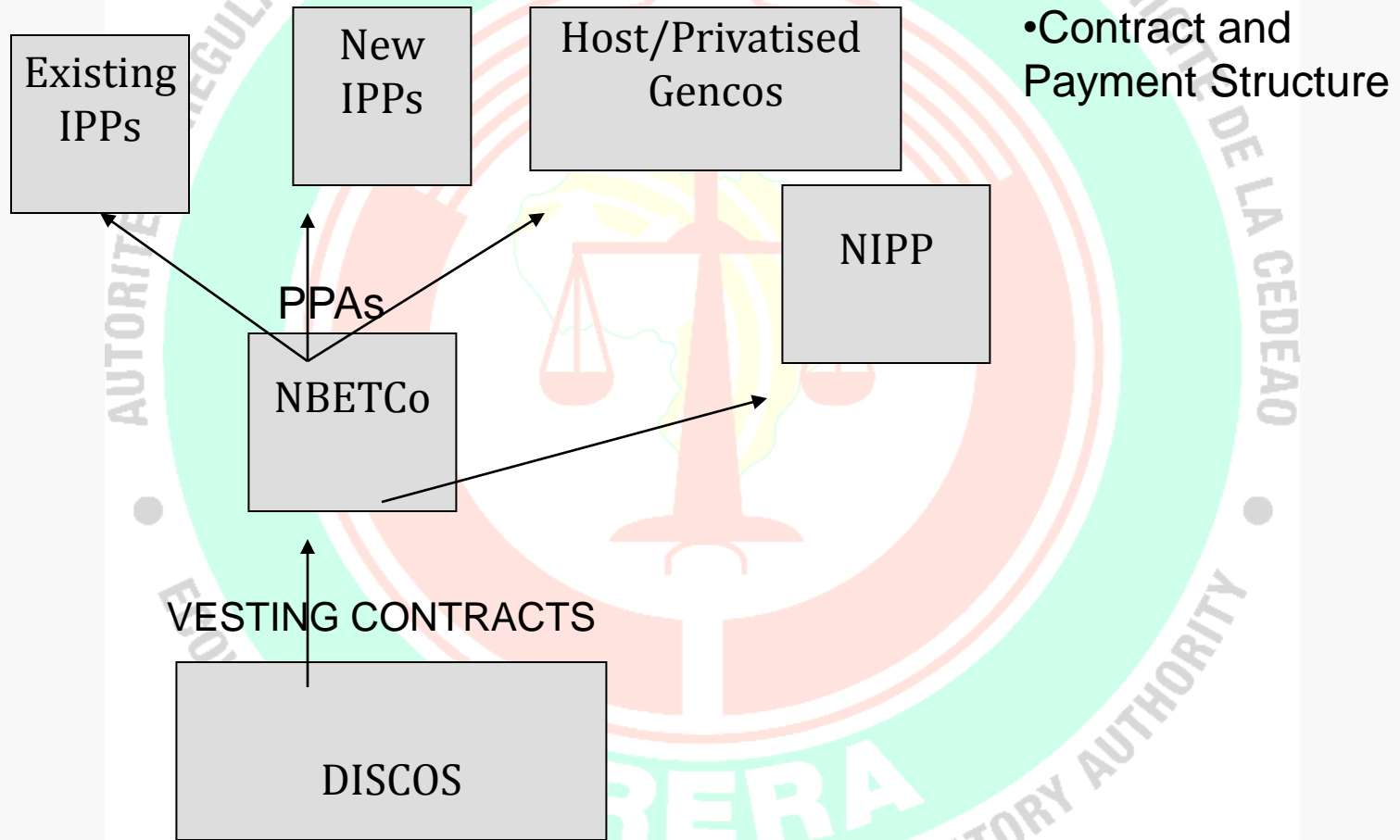
PPA-MILESTONES

- In addition, will want to ensure that plant can operate below 100% capacity without endangering the PPA.
- Look for adjustment mechanisms in capacity charges when plant is unable to comply with guaranteed level of energy.

TERMINATION OPTIONS

- **Termination Payments.**
- Some PPAs have provisions allowing the off-taker to purchase plant for any of the following reasons:
 - 1. defaults by the project company under the PPA;
 - 2. Force Majeure;
 - 3. public interest (where the off taker is a publicly owned distributor).

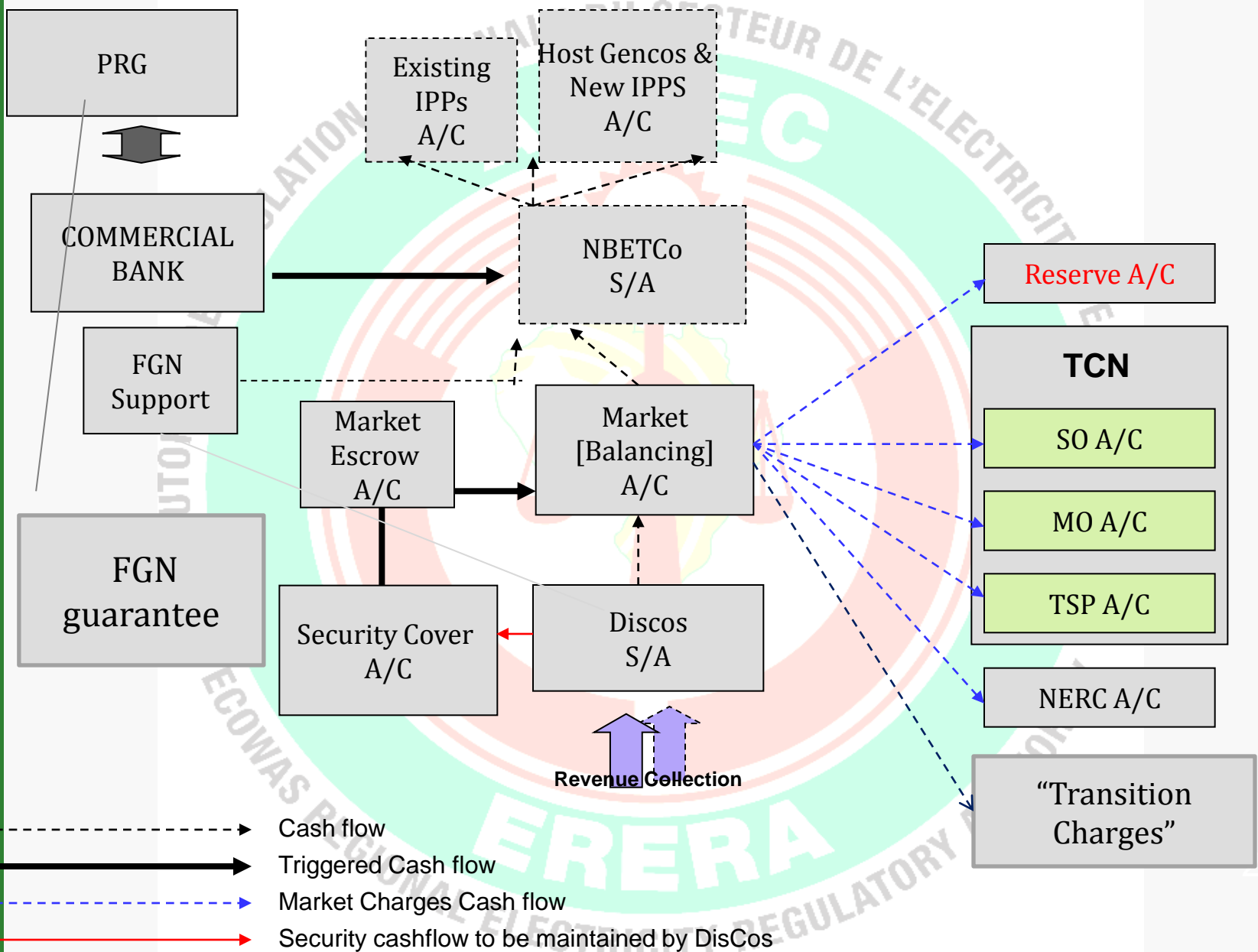
Settlement & Payment Arrangements (Nigerian CASE STUDY)



SUMMARY OF PAYMENT SYSTEM WITH PAYMENT SECURITY ARRANGEMENT

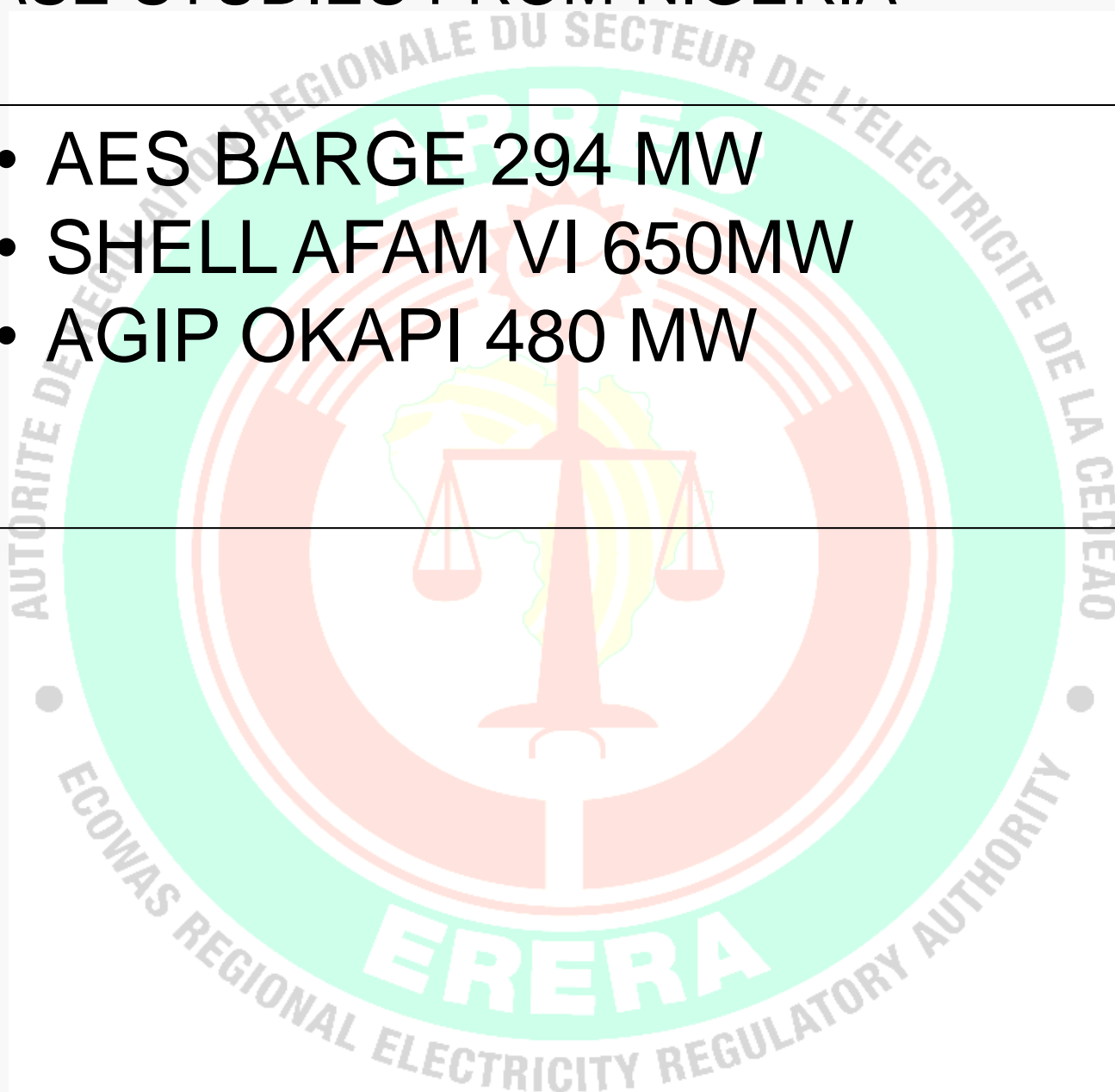
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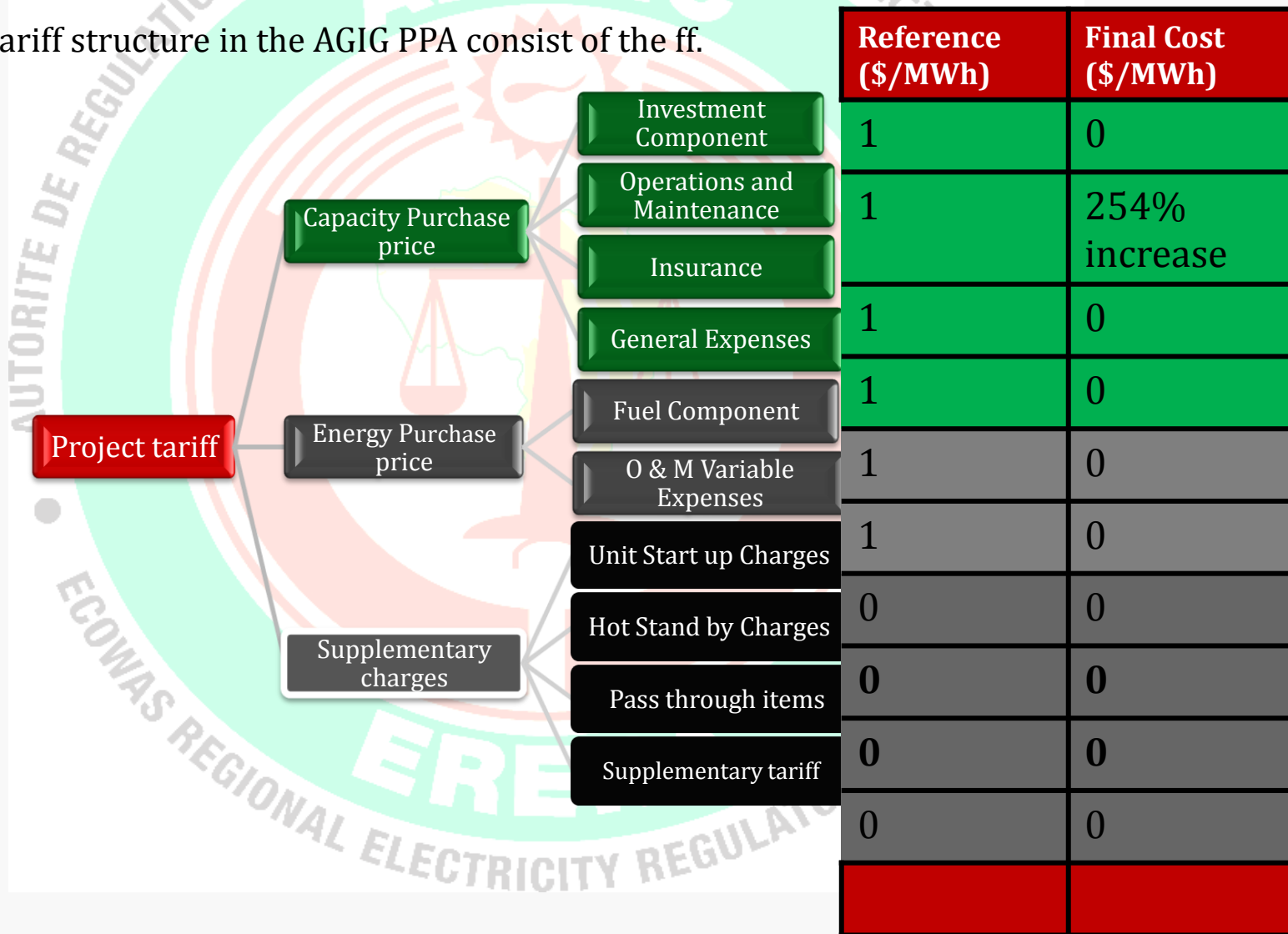
CASE STUDIES FROM NIGERIA

- AES BARGE 294 MW
- SHELL AFAM VI 650MW
- AGIP OKAPI 480 MW



AGIP's Tariff Structure

- The tariff structure in the AGIG PPA consist of the ff.



ROLE OF REGULATORS IN IPP/PPAs

Regulators play a role in development of IPP/PPAs through different means

- PPA benchmarking
- Licencing regulations
- Wholesale price regulation
- Retail price regulation
- Direct regulatory intervention

Check List For PPA Drafting & Negotiation

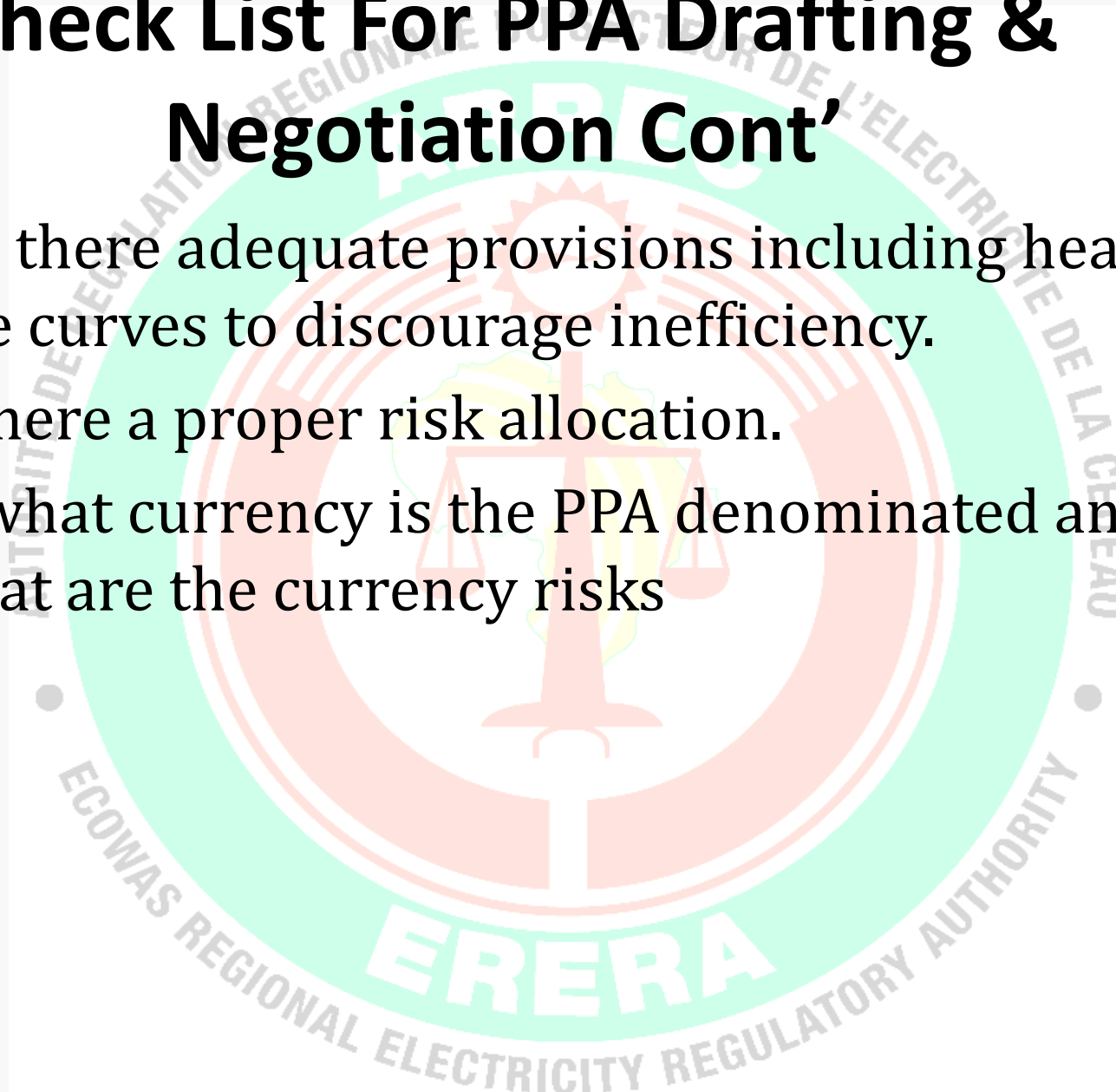
- Is the off take price firm
- Is the capacity component of the price sufficient for debt service and other fixed costs and energy payment capable of supporting the variable costs
- When do capacity payments kick in
- What are the escalation formulae and structure
- Is regulatory approval required before escalators can kick in

Check List For PPA Drafting & Negotiation Cont'

- Is the contract term sufficient to provide revenues to cover full amortization of the loans
- What is the penalty structure both for late delivery and payments
- Any penalty for failure to deliver declared capacity
- Are force majeure provisions compatible with industry norms
- Is there a need for security agreements

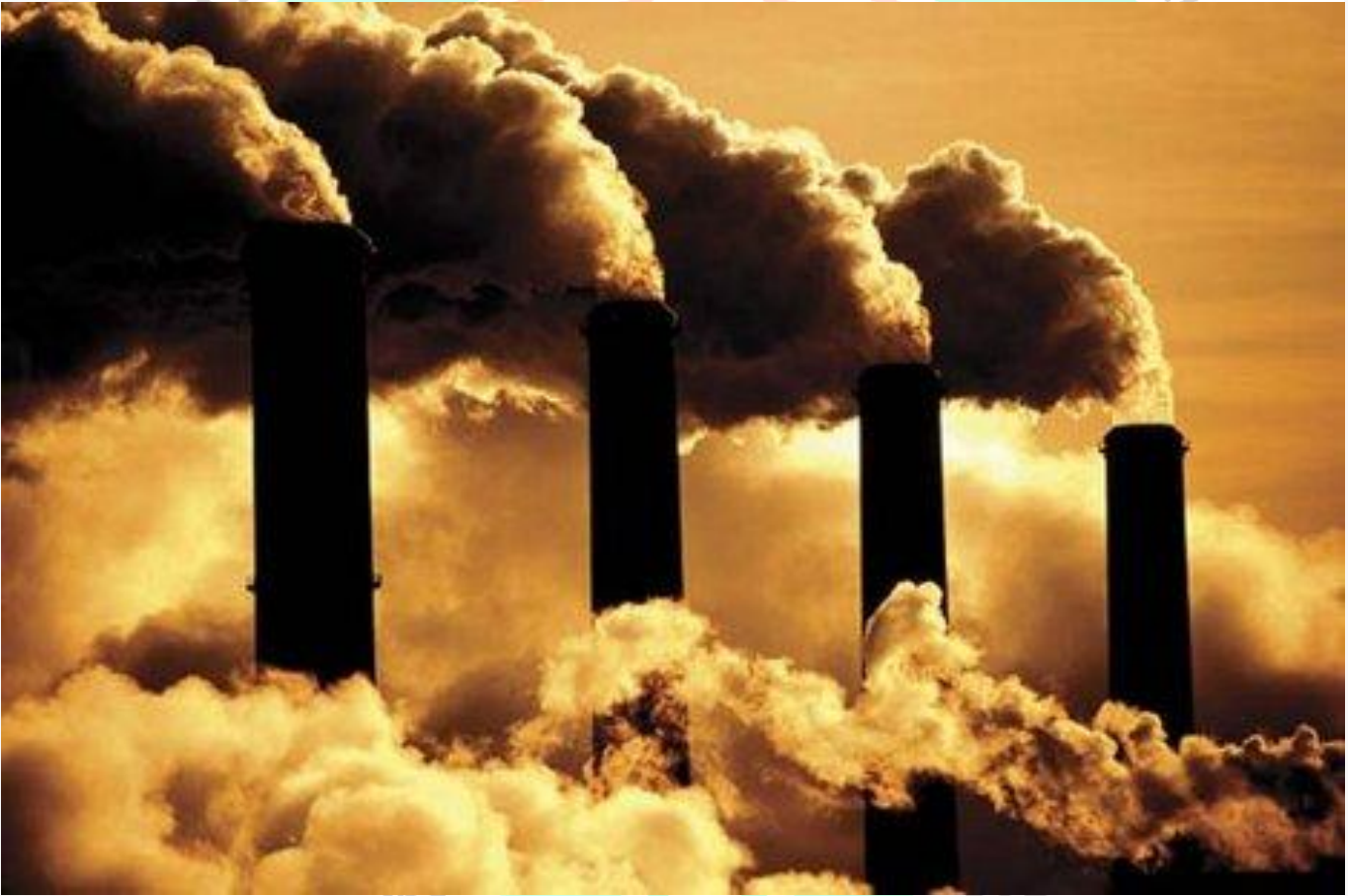
Check List For PPA Drafting & Negotiation Cont'

- Are there adequate provisions including heat rate curves to discourage inefficiency.
- Is there a proper risk allocation.
- In what currency is the PPA denominated and What are the currency risks



Conclusion

- PPA's are highly specialized documents that required, technical, legal and commercial skills to draft and negotiate
- Do not assume that because you are a commercial lawyer you have capacity to deal with PPA's without adequate training
- Lawyers should seek formal training in economics and related discipline before embarking on PPA negotiations or drafting.
- An understanding of project finance is always an advantage in handling PPA's.



PRESENTER INFO



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- Former Board Member PHCN
- Has participated in the drafting and negotiation of most of the existing power purchase agreements in the country Nigeria
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