

# Proposed Feed-in Rate Policy for Generation in RP

# How can Distributed Generations fit in?

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#### Assumptions (EPIRA)

- Only for captive markets
- New IPPs to sell to Distcos only
- Pre Retail Access: rates are regulated
- While Distcos not obliged to make supply adequate, obliged to get most economical if there are suppliers
- Genco rates: immediate pass through?



# Grid Example (Visayas or Mindanao)

- No excess NPC capacity
- Generation rates must be other than grid's (sec 67 of EPIRA)
- ERC March 2004 guidelines on cost recoveries on part of Distcos
- Bidding for every contract (with indices, e.g. inflation, forex, fuel), returns fixed?
  - Benchmarking (with indices): better?



### **Bidding**

- Each requirement to be bidded out
- Problem of comparison and evaluation among different technologies, sizes, fuels, markets being targeted (e.g. base vs intermediate vs peak)
- Time consuming if each contract to be vetted by ERC
- Rates to vary widely, hard to justify politically



## Benchmarking

- ERC to decide/regulate, info from privatization of NPC assets can help
- Future-oriented rates (LRMC LRAC), past costs are sunk, not relevant
- Formula for each segmented market?
- Any contract less than benchmark should be readily approved



# How to apply to DGs: (renewables, cogeneration)

- Add benchmark figures to transmission costs to get at delivered rates
- If DGs defer distribution costs, should these be part of the delivered rates?
- Will avoided generation costs be at peak (TOUs)?
- Additional incentives of NRE bill
- Add carbon credits if qualified



#### Distributed Generation (DGs)

- Renewables: environmentally benign
- Co-generation: high thermal efficiency
- Linked to distribution networks of distcos
- Externalities (public goods): reliability, security, voltage support, reduced losses
- Sizes suit peaks of Distcos outside of Meralco
- May need more back-up reserves



## Example of application (PVs):

- Location: feeders where marginal cost of network expansion is high, paradigm of average-cost pricing dropped
  - congested lines, low demand growth
- Deferment of distribution facilities: add to avoided transco rates plus TOU gen rates plus values of local externalities
  - Cepalco's on-grid PV: equity is sum of above except externalities



### Viability to depend on:

- Delivered rates: sum of
  - benchmark generation rates
  - avoided transmission rates
  - deferred distribution costs
  - values of local externalities
- Adders: NRE Bill, subsidies from Multilateral funds (e.g. GEF), ODA funds, carbon credits
- Rates: more important than incentives?



#### Barriers to entry

- Grid rates are below true costs (sec 25)
- Conventional central stations: environmental costs of fossil fuels not factored in
- Will ERC value positive externalities? How?
- Can Distcos tap missionary extension funds?
- Immediate pass through of generation costs: stymied by SC decision

