CFL distribution Pilot Project in Sri Lanka

JICA Study Team

Outline

1. DSM Project Target

⇒ 'Peak cut' & 'Subsidy reduction'

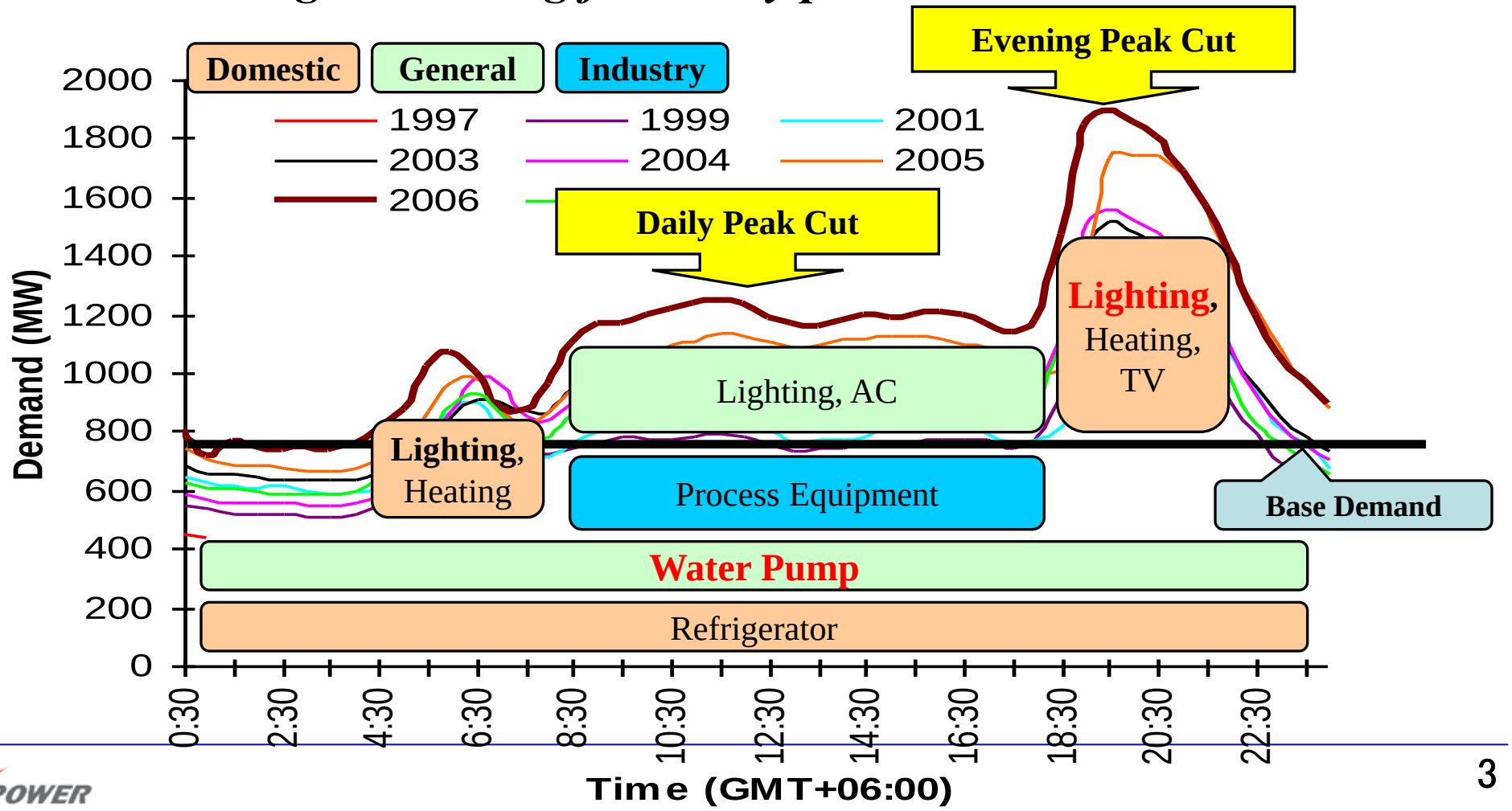
2. Measure being selected

⇒ 'CFL distribution Pilot Project'

DSM 'Project' Target (1) 'Peak Cut'

1st Target : Lighting for 'Evening peak cut'

2nd Target : Cooling for 'Daily peak cut'



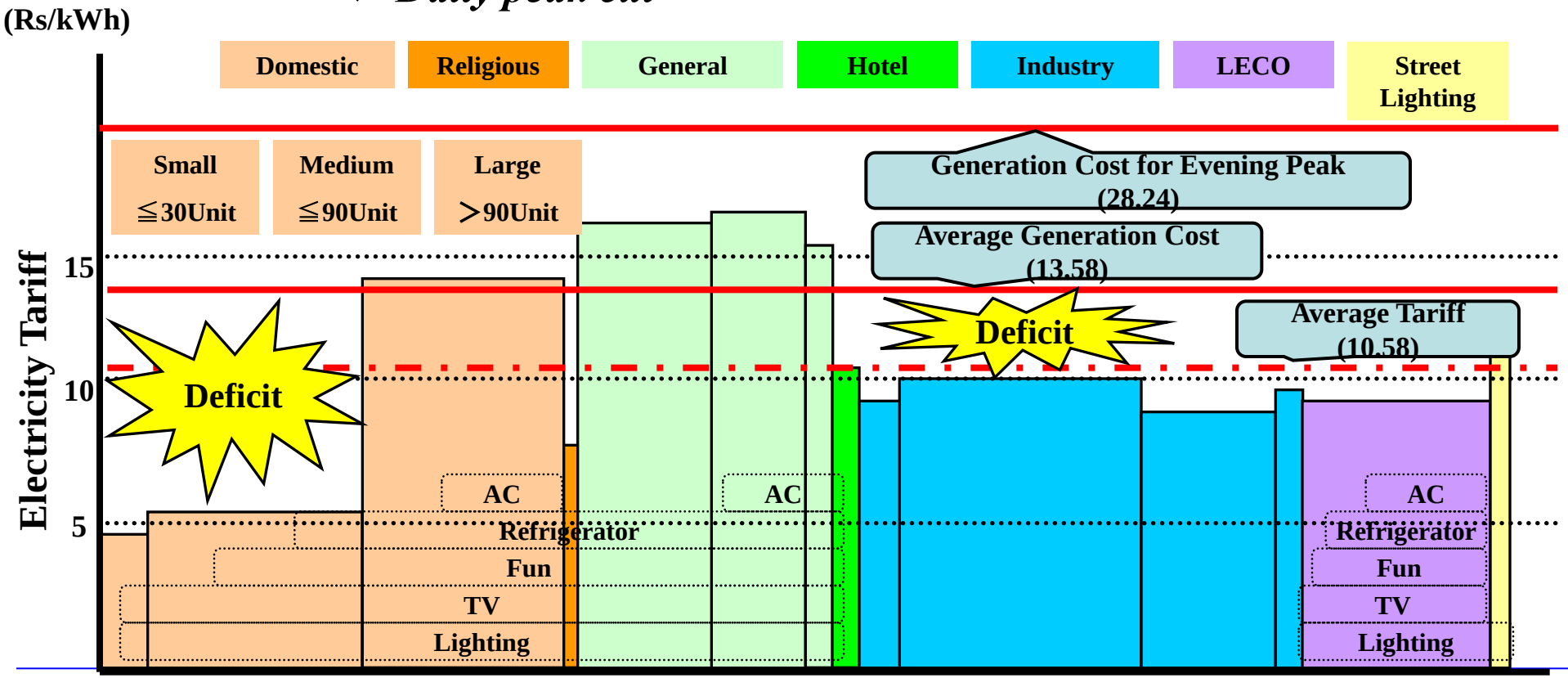
DSM 'Project' Target (2) 'Subsidy Reduction'

1st Target : Lighting for Domestic (Small, Medium)

⇒ 'Subsidy reduction' and 'Evening peak cut'

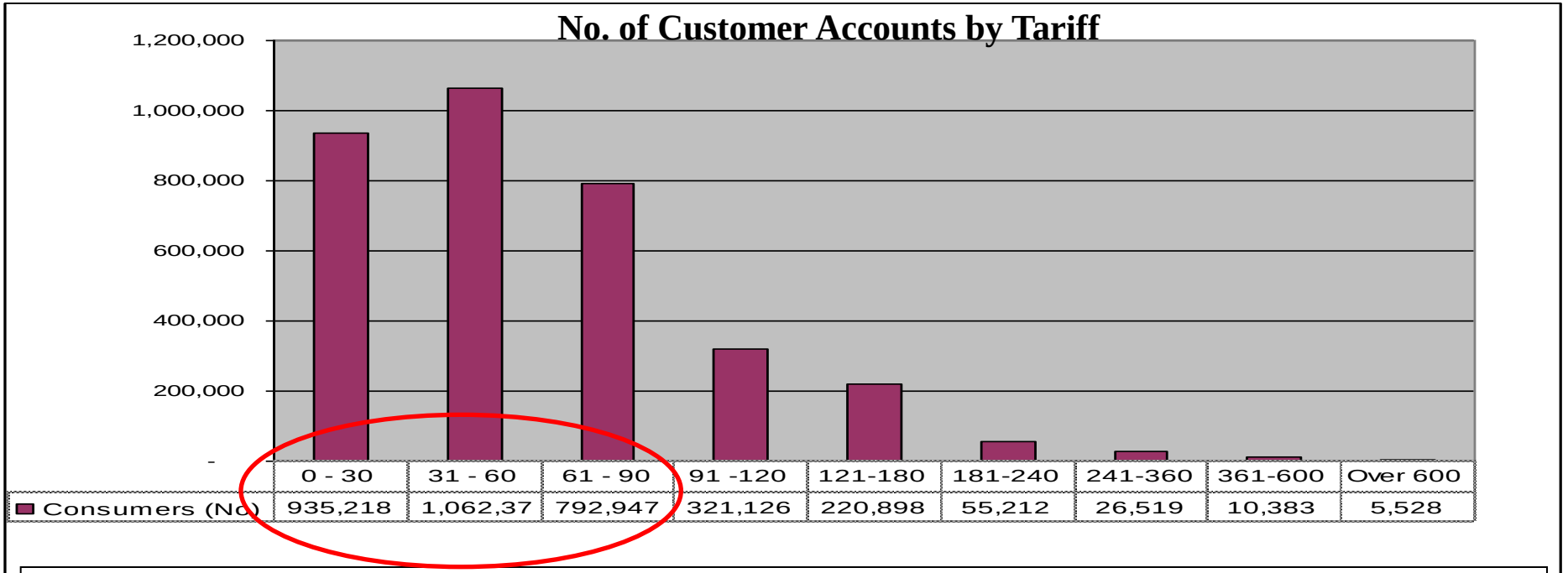
2nd Target : Cooling for Domestic (Medium, Large) and General consumer

⇒ 'Daily peak cut'



(Source: Central Bank of SL,2007)

Impact of 5 mil CFL National-wide Program



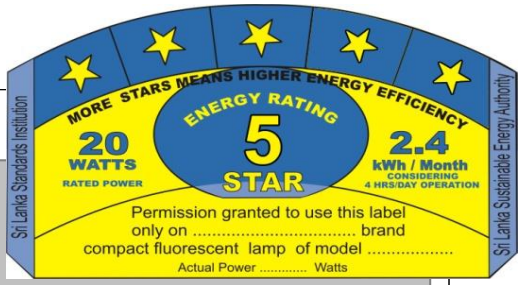
	0 - 30	31 - 60	61 - 90	91 -120	121-180	181-240	241-360	361-600	Over 600
Consumers (No)	935,218	1,062,37	792,947	321,126	220,898	55,212	26,519	10,383	5,528

【Target Customers: 2.7mil Customers】
0-30 unit: 1.7mil CFLs (4units/Consumer)
31-60 unit: 1.9mil CFLs (4units/Consumer)
61-90 unit: 1.4mil CFLs (4units/Consumer)
Total : 5.0mil CFLs

Peak Cut*: 150MW
Electricity Reduction: 219GWh/yr**
Subsidy Reduction*: Rs.2bil/yr**
(Rs.8bil/Lifetime)

*55W(GSL) change to 15W(CFL), 5mil units, Lighting rate is 75%, **Used time is 4 hours/day,***Subsidy Rs.9/kWh

Linkage to National Labeling



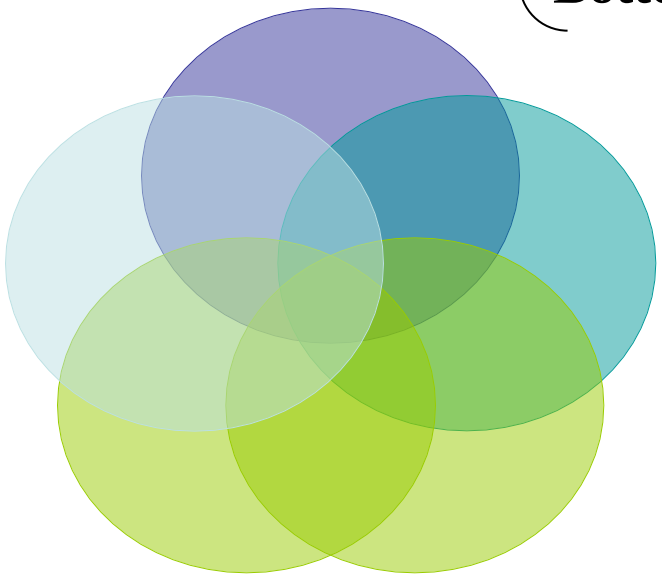
Performance Grading (PG) = Efficacy (Lumen/Watt) × 0.9 + Power Factor × 0.1 + Color correction coefficient

'Various quality of CFL is in Sri Lankan market'

5 Win-Win Program

SLGV

Subsidy reduction
Energy security contribution
Technology improvement
Bottom of pyramid policy



Donors

Environment-friendliness
Bottom of pyramid policy
Sustainable program

Utility

Peak cut
Overall Electricity Management
Functional Electricity Tariff

Vendor

Increased sales
Large volume of sales

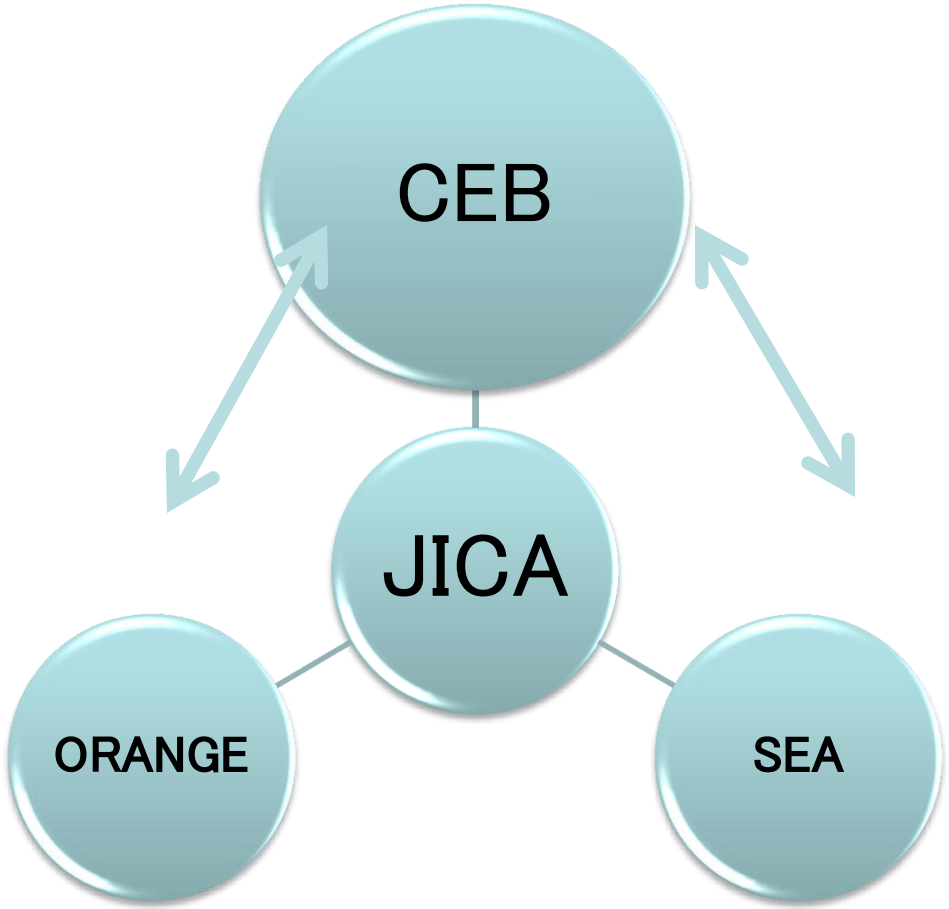
Customer

Electricity bill reduction
No or small initial cost
Good quality lamps

'All stakeholders are satisfied with EE programs such as CFL '

Project Stakeholders

- Orange
- JICA Project Team
- CEB
- SEA



Methodology & Result

Price : US$1.5

- **No of Consumers : 1116**
- **Total Lamps : 2000**
- **CFL Type : 11W & 15W**
- **Star Rating : 3 star (EE labeling)**
- **Limit : 4 Bulb Max**
- **Condition : Change from Incandescent lamps to CFLs**
- **Payment Method : 3 Months Installment through Utility**
- **Distribution Method : Door to Door approach by meter reader & distributor**
- **Result : Over 80% consumers purchased CFL (Change)**

Procedure

Identify the target areas / Customers

↓

Electricians, Meter readers,& Dealers appointed in that area

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Promotional campaign – Door to Door promotion / Propaganda vehicle / Giant screen

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Visit electricians & Meters reader door to door

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Customer return GLS & purchase CFL

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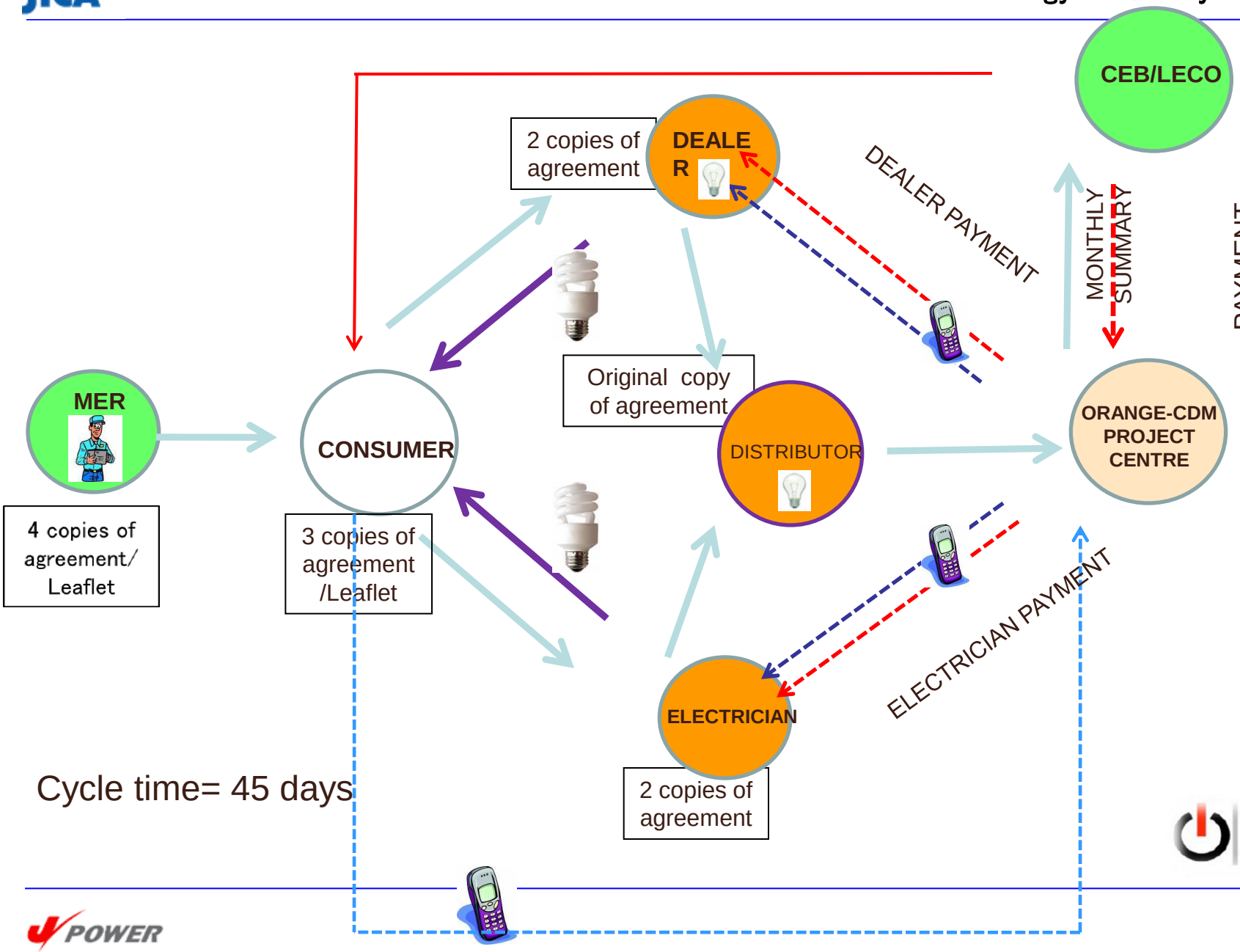
Monitor Customer and Transformer Loading

DISTRIBUTION MECHANISM



Propaganda Vehicle

Wide Screen(8'*12')

Conformation Sticker

ORANGE ELECTRIC

- Project was a absolute success.
- Price is comfortable with customers (150 /=).
- Door to Door is a proven method .
- Should consider about power factor.
- Need to introduce CFL disposal system.

THANK YOU

for your attention