

Proposal for Electricity Improvement



Electric Power Committee, JCCIC, October 2015

Proposal for Electricity Improvement

Agenda

1. Gratitude for;

- periodical disclosure of power sources
(new power plant, expansion, power purchase)**
- removal of the power restriction**
- continuing “one to one meeting” with
TNEB/TANTRANSCO/TANGEDCO**

2. improvement of sudden power failure

3. Conclusion

Proposal for Electricity Improvement

Agenda 2. improvement of sudden power failure (1)

Power failuar situation in July

25-Aug-15

1	2		3	4		5
company	location		frequency	duration		remarks
	SIPCOT	Suppliers Park	(times/day)	total hours per day	monthly basis(hours)	
A	○	×	1.7	0.85	21.25	there is a variability from day to day, max. 4 times 4 hours a day. Planned full day power cut on the second Tuesday has continued without notice, though it has been announced to be been removed.
B	○	×	1.2	1.00	24	supply from TNEB was stopped due to maintainance of the company's facility
C	○	×	5	0.17	4.2	other than this, there were 6times/ave. 1.5 hours power failuars from 1st Aug. to 16th.
D	○	×	0.28	1.32	9.2	7times per month, ave. 1.32 hours at a time
E	○		2.2	2.42	60.5	max. 5 times 3.8 hours a day
F	○	×	0.12	2.00	0.2	3times per month, ave. 2 hours at a time
G	×	×	1.8	3.96	99	
H	X	X	0.84	1.09	27.3	Maintenance power cut every Friday from 9:00am to 3:00pm. Maximum 4 times a day. Maximum 8.5 hours a day.
I	○	○	0.1	0.40	10	after starting power spply from the beginning of July, power failure occurred twice. TNEB informed the cause of the trouble.
J	×	×	1.88	2.44	61.1	max. 4 times per day
K	○	○	0.02	0.00	0.05	
L	×	×	0.77	0.92	23.1	30% power cut was informed in advance.
M	○	×	0.16	0.88	0.1	4times per month, 0.88 hours at a time. This kind of trouble happened, Machine Electronics componts easily getting failure.
		AVE.	1.24	1.05	26.16	

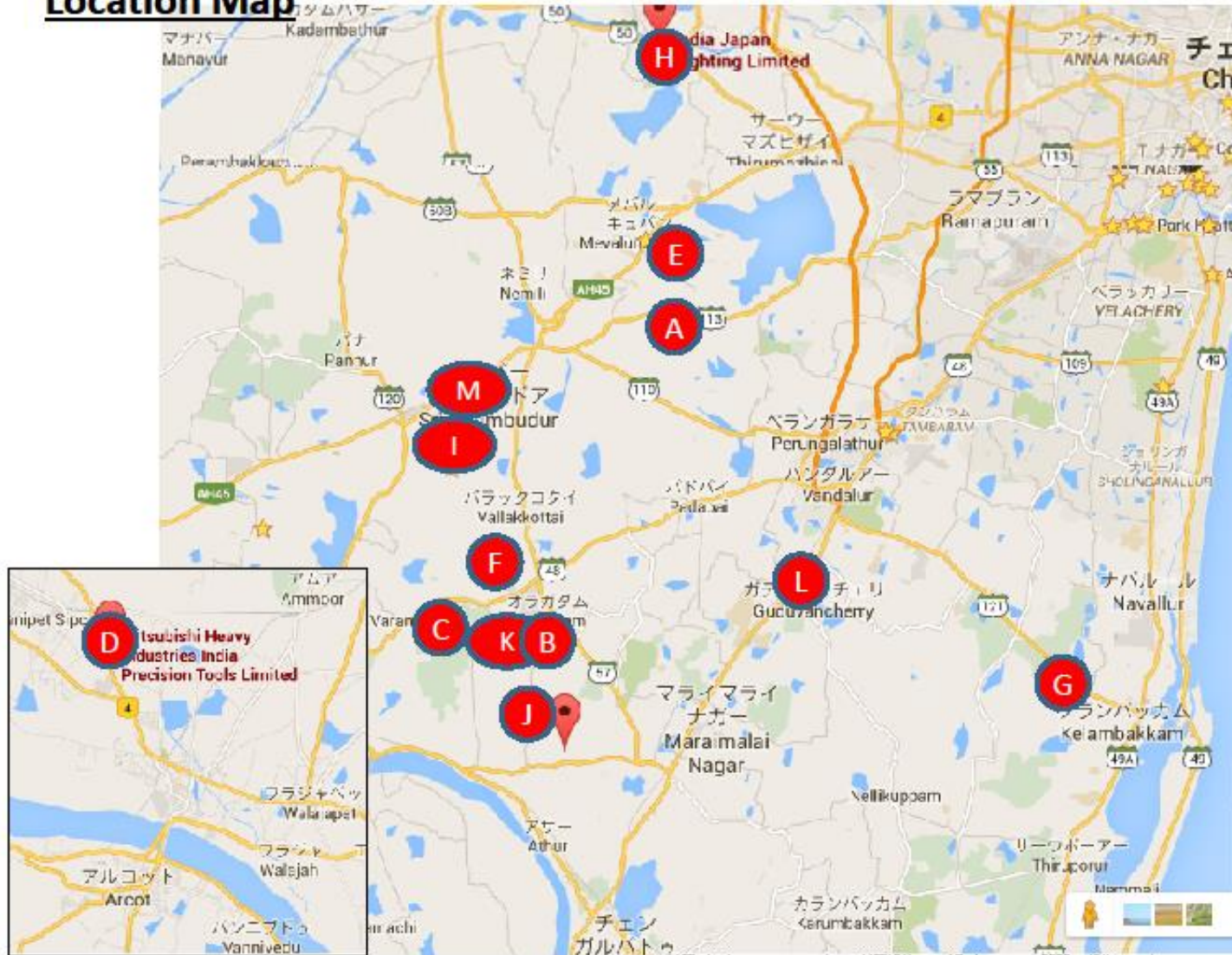
* 6 companies have power failuar more than once a day.

* 7 companies have more than 20 hours power failuar per month.

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Agenda 2. . improvement of sudden power failure (2)

Location Map



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Agenda 2. . *improvement of sudden power failure (3)*

Out of 13 companies which cooperated our survey,

- 6 companies have power failure more than once a day.
- 7 companies have more than 20 hours power failure per month.
- Situation was almost the same in August - September



We would like to request Tamil Nadu government to investigate its cause and to improve it.

For many of manufacturers, they were forced to dispose of the entire products under process in case sudden power failure occurs, resulting in big losses.

⇒ Discussion with TANTRANSCO is progressing

request to TN Government:

<ongoing>

- *no power restriction*
- *periodical disclosure of power sources
(new power plant, expansion, power purchase)*
- *one to one meeting with TANTRANSCO*

<new>

- *to improve sudden power failure through
the discussion with TANTRANSCO*

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reference 1. Current situation and prospect of electricity supply

JETRO

TN Thermal and Nuclear Power Plants Location Map

As of 9th Oct. 2015

[Vallur] ※ NTPC(Central G)-JV of TNEB
 ○ Unit 1 (500MW(375MW) : Nov.2012)
 ○ Unit 2 (500MW(375MW) : Aug.2013)
 ○ Unit 3 (500MW(350MW) : Feb.2015)

[Neyveli] ※ NLC(central G)
 ○ Station 1 (6×50MW + 3×100MW (total 475MW): May 1962)
 ○ Expansion (420MW(226MW) : Oct 2002)
 ○ Station 2 (7×210MW(909MW) : Mar.1986)
 ○ Expansion (2×250MW(First Unit: Mar.2014, Second unit : Feb.2015)
 ※ TN(Total Unit) : 230MW

[Mettur]
 ○ Unit 1 (210MW: Jan.1987)
 ○ Unit 2 (210MW: Dec.1987)
 ○ Unit 3 (210MW: Mar.1989)
 ○ Unit 4 (210MW: Mar.1990)
 ○ Stage 3 (600MW: Oct 2013)

[Tuticorin]
 ○ Unit 1 (210MW: July.1979)
 ○ Unit 2 (210MW: Dec.1980)
 ○ Unit 3 (210MW: April.1982)
 ○ Unit 4 (210MW: Feb.1992)
 ○ Unit 5 (210MW: Mar.1991)
 ※ NLC(Central G) -JV/TNEB
 ○ Unit 1 (500MW(194MW) : Jun.2015)
 ○ Unit 2 (500MW(193MW) : Aug.2015)

[Kudankulam] ※ NPCIL(Central G)
 □ Unit 1 (1000MW: Dec.2014)
 ■ Unit 2 (1000MW: Dec.2015)
 ※ Share of TN(Unit total): 1025MW
 ■ Unit3~4 (2×1000MW: TBD)

[Cheyyur] ※ Central G Project
 ● Unit 1~5(5×800MW: FY 2019)
 ※ Share of TN (Total Unit) :1600MW

[North Chennai]
 ○ Unit 1 (210MW: Oct .1994)
 ○ Unit 2 (210MW: Mar.1995)
 ○ Unit 3 (210MW: Feb .1996)
 ○ Stage 2 Unit 1 (600MW: Mar.2014)
 ○ Stage 2 Unit 2 (600MW: May.2014)
 ● Stage 3 (800MW: FY2019)

[Ennore]
 ○ Unit 1 (60MW: Mar 1970)
 ○ Unit 2 (60MW: Feb.1971)
 ○ Unit 3 (110MW: May.1972)
 ○ Unit 4 (110MW: May 1973)
 ○ Unit 5 (110MW: Dec. 1975)
 ● Expansion (660MW: FY2017)
 ● Replacement (660MW: FY2020)
 ※ Ennore SEZ
 ● Unit 1 and 2 (2×660MW: FY2018)

[Basin Bridge] △ 4 Units (4×30MW: 1996)

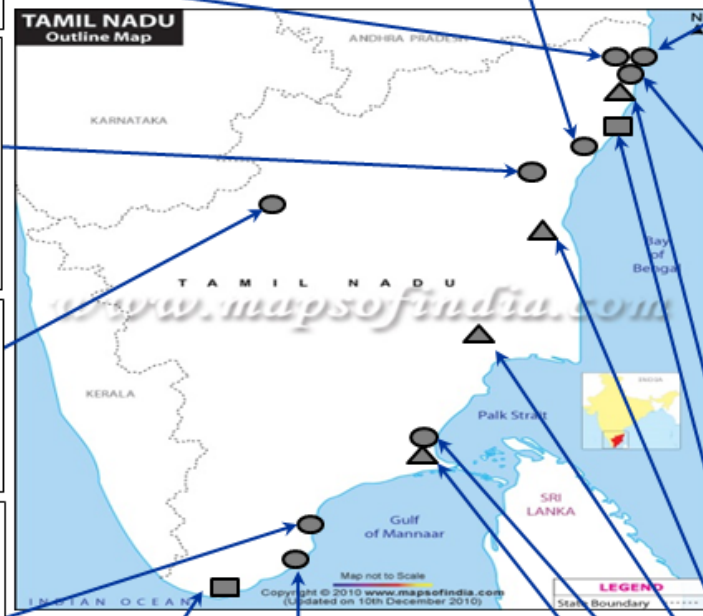
[Kalpakkam] ※ MAPS(Central G)
 □ Unit 1 (220MW: Jan.1984)
 □ Unit 2 (220MW: Mar.1986)
 ※ TN(Total Unit) : 331MW

[Kuttalam] △ 1 Unit (101MW: 2003)

[Thirumakkottai (Kovilkalappal)]
 △ Unit 1(107.88MW: 2001)

[Uppur] ● Unit 1&2 (2×800MW: FY2020)

[Valuthur] △ Phase 1 (95MW: 2003)
 △ Phase 2 (92.2MW: 2008)



[Udangudi]
 ● Unit 1&2 (2×660MW: FY2018)
 ● Expansion (2×660MW: TBD)
 ● Stage 3 (2×660MW: FY2020)

○ : coal-fired, △ : Gas-fired, □ : Nuclear
 BLUE: FY2015 in-service(Plan)
 RED: Planned in 2016 and onward

(*1) Only Projects by Central and State Government are listed, not by private enterprise.
 (*2) Figures in brackets for central government projects indicate quantum of power (in MW) allocated to TN State.
 (*3) Regarding central government projects, thermal and nuclear power plants within TN states is plotted. (Any power received outside of the states is omitted). Also, plants commissioned by NTPC(Total generating capacity of 2600MW) does not show in the map since the plant was not clear.
 (Data : Compiled by JETRO based on data published by TN State, NPCIL and NTPC)

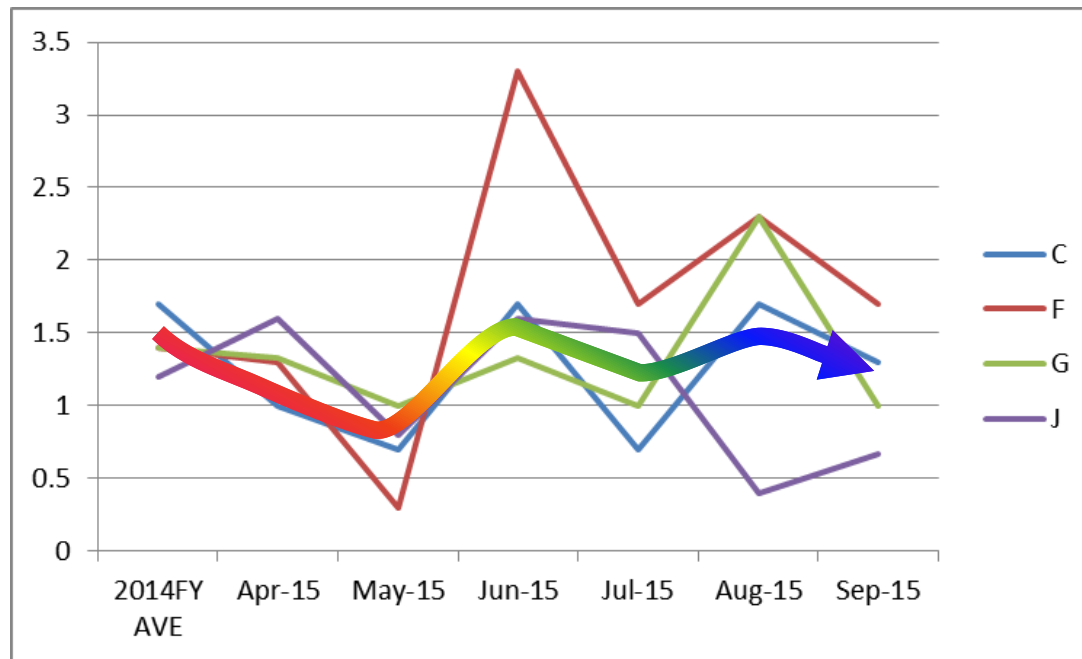
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reference 2.Current situation of Japanese manufacturers 1

Graph 1) Trend of Power Cut

Apr 2015--Sep 2015

Power Cut Frequency
(Times / day)



Sudden Power Cuts are happening in no-restriction months of 2015.

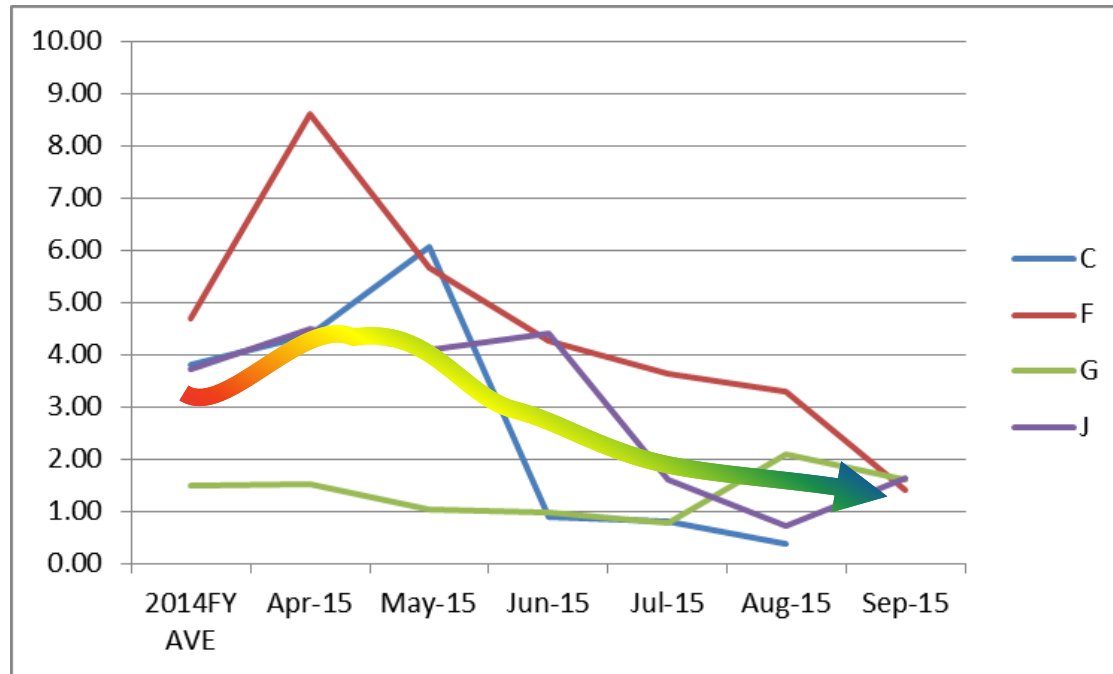
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reference 3.Current situation of Japanese manufacturers 2

Graph 2) Trend of Power Outage

Apr 2015--Sep 2015

DG Power
(Hour / day)



Operating DG costs approx. 3 times as EB charge. It's imposing a heavy burden on manufacturers.