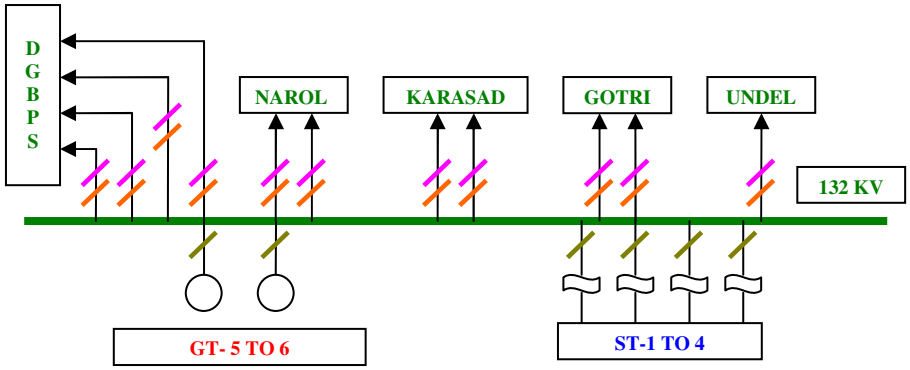
1. DHUVARAN THERMAL POWER STATION (DTPS):



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
5	110	110
6	110	110
TOTAL	220	220

A. METERING ARRANGEMENT:

Sr. No.	Type	Quantity
1	Main	14
2	Check	13
3	Stand By	5
	Total	32

Main (14 nos.) and Check (13 nos.) Meters are installed at outgoing line and tie line between DTPS and DGBPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

In order to ensure the correctness of energy recorded in meter data, the difference between energy recorded between main and check meter will be calculated and evaluate by SLDC. In the event of encryption of main meter data, the check meter or stand by meter data will be considered for the energy accounting purpose.

B. SCHEDULING ARRANGEMENT :

Pool losses of Intra State Transmission Network: ***l % (estimated by SLDC)***
Ex-bus Availability declaration of DTPS $_{(5\text{-}6)}$ in one block = ***DC*** $_{(dtps\ 5\text{-}6)}$
Net ex-bus Injection Schedule of DTPS $_{(5\text{-}6)}$ (in one block) = ***SDL*** $_{(dtps\ )}$
Entitlement of beneficiary at ex-bus P/P of Generating Station =

*ENT (b1) = (x/100 * DC (dtps 5-6)) …..at ex-bus P/P*
*ENT (b2) = (y/100 * DC (dtps 5-6)) ……at ex-bus P/P*

Entitlement of beneficiary at ex-P/P of Beneficiary =

*Ent (b1) = (x/100 * DC (dtps 5-6)) - (l/100 * x/100 * DC (dtps 5-6))*
*Ent (b2) = (y/100 * DC (dtps 5-6)) - (l/100 * y/100 * DC (dtps 5-6))*
.

.
.

And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1(%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of **DTPS (5-6)** will be derived for each 15 minute block as under:

$$SDL_{(dtps)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT (ESO) OF DTPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(dtps)} = \Sigma [\, OG\ (Vatva\text{-}1) + OG\ (Vatva\text{-}2) + OG\ (Undel) + OG\ (Karasad\text{-}1) + OG\ (Karamsad\text{-}2) + OG\ (Gotri\text{-}1) + OG\ (Gotri\ -2) + OG\ (DGBPS\text{-}1) + OG\ (DGBPS\text{-}2) + OG\ (DGBPS\text{-}3) + OG\ (DGBPS\text{-}4) + OG(BUT\text{-}1) + OG(BUT\text{-}2)] \ldots\ldots\ldots\ldots\ldots (ii)$$

D. **UNSCHEDULED INTERCHANGE OF ENERGY (UI(DTPS)):** The net unscheduled interchange energy of Dhuvaran generating station will be calculated as difference between schedule energy and energy sent out for each 15 minute block.

$$\sum \mathbf{UI\ (dtps)} = \sum_{i=1}^{i=96} (SDL_{(dtps))} - ESO_{(dtps)}))$$

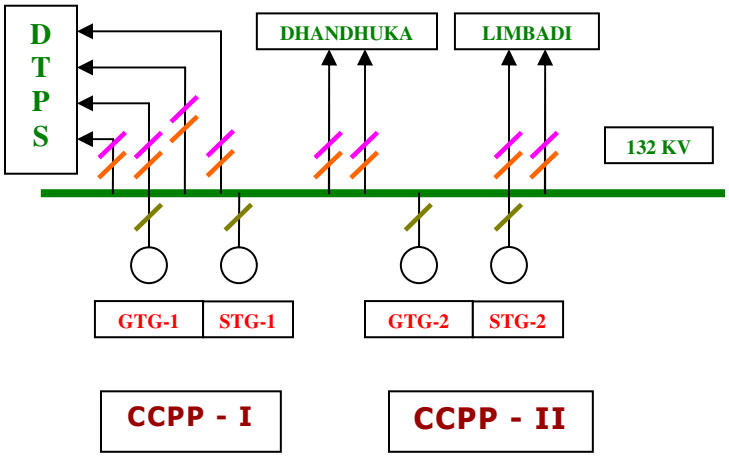
……as per equation (i)-(ii)……(iii)

If,

(i) Injection of DTPS is less than Schedule, UI(dtps) will be positive and DTPS will be payable for compensating under injection in that respective 15 minute block.

(ii) Injection of DTPS is higher than Schedule, UI(dtps) will be negative and DTPS will be receivable for compensating over injection in that respective 15 minute block.

2.0 DHUVARAN GAS BASED POWER STATION:



DHUVARAN GAS BASED CCPP-I		
UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
GT-1	67.617	67.617
STG	39	39
TOTAL	106.617	106.617

DHUVARAN GAS BASED CCPP-II		
UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
GT-2	72.51	72.51
STG	39.94	39.94
TOTAL	112.45	112.45

A. METERING ARRANGEMENT :-

Sr. No.	Type	Quantity
1	Main	8
2	Check	8
3	Stand By	4
	Total	20

Main (08 nos.) and Check (08 nos.) Meters are installed at outgoing line and tie line between DTPS and DGBPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT :-

Pool losses of Intra State Transmission Network ***: l %***
Net Ex-bus Availability declaration of DGBPS in one block = ***DC*** *(DGBPS 1-2)*
Net ex-bus injection schedule of DGBPS in one block = ***SDL***$_{(DGBPS\ 1\text{-}2)}$
Entitlement of beneficiary at ex-bus P/P of Generating Station=

$$ENT_{(b1)} = (x/100 * DC_{(DGBPS\ 1\text{-}2)})$$
$$ENT_{(b2)} = (y/100 * DC_{(DGBPS\ 1\text{-}2)})$$

Entitlement of beneficiary at ex- P/P of beneficiary:

$$Ent_{(b1)} = (x/100 * DC_{(DGBPS\ 1\text{-}2)}) - (l/100 * x/100 * DC_{(DGBPS\ 1\text{-}2)})$$
$$Ent_{(b2)} = (y/100 * DC_{(DGBPS\ 1\text{-}2)}) - (l/100 * y/100 * DC_{(DGBPS\ 1\text{-}2)})$$

.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1(%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of **DGBPS(1-2)** will be derived for each 15 minute block as under :

$$SDL_{(DGBPS\ 1\text{-}2)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots (i)$$

In case of gas turbine generating station or a combined cycle generating station, scheduled generation will required to be corrected with respect to average frequency, scheduled generation and declaration of generating station of that station. Therefore, scheduled generation is corrected as under :

$$PFSDL_{(DGBPS\ 1\text{-}2)} = (\text{frequency correction factor}) \times SDL_{(DGBPS\ 1\text{-}2)} \ldots\ldots (ii)$$

Where, frequency correction factor is to be considered as per the definition of "**Scheduled Generation**" in tariff regulation issued by Hon'ble commission.

C. ENERGY SENT OUT (ESO) OF DGBPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(dgps)} = \Sigma\ [OG\ (Limbadi\text{-}1) + OG\ (Limbadi\text{-}2) + OG\ (Dhandhuka\text{-}1) + OG\ (DTPS\text{-}4) + OG\ (Dhandhuka\text{-}2) + OG\ (DTPS\text{-}1) + OG\ (DTPS\text{-}2) + OG\ (DTPS\text{-}3)] \ldots\ldots (ii)$$

UESO of DGBPS -I =

$$UESO_{(DGBPS\text{-}I)} = \Sigma\ [UESO\ (Unit \neq GT\text{-}1) + UESO\ (Unit \neq STG\text{-}1)]$$

Where, UESO(Unit # 1) = Output of GT- 1
UESO(Unit # 2) = Output of STG-1

UESO of DGBPS -II =

$$UESO_{(DGBPS\text{-}II)} = \Sigma\ [UESO\ (Unit \neq GT\text{-}2) + UESO\ (Unit \neq STG\text{-}2)]$$

Where, UESO(Unit # 1) = Output of GT- 2
UESO(Unit # 2) = Output of STG-2

D. **UNSCHEDULED INTERCHANGE ENERGY (*$UI_{(DGBPS\ 1\text{-}2)}$*) :-** The net unscheduled interchange energy of Dhuvaran Gas Based Generating station will be calculated as difference between schedule energy and energy sent out for each 15 minute block.

FOR DGBPS -I

$$\sum UI_{(DGBPS\ 1} = \sum_{i=1}^{i=96} (PFSDL_{(DGBPS\ 1\text{-}2)} - UESO_{(DGBPS\text{-}I)})$$

FOR DGBPS -II

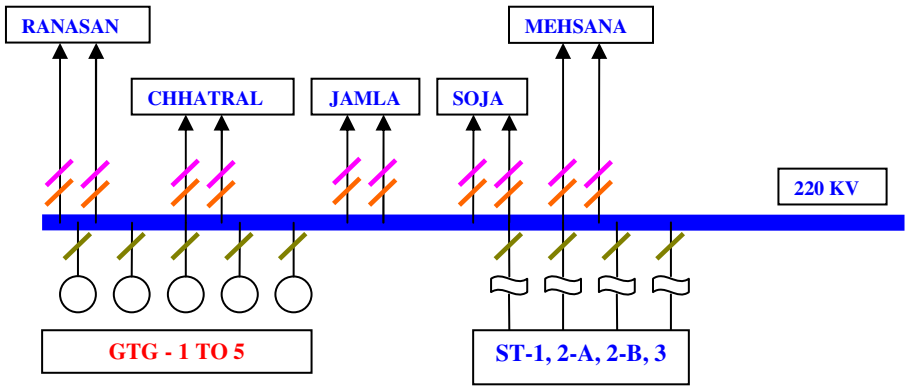
$$\sum UI_{(DGBPS\ 2} = \sum_{i=1}^{i=96} (PFSDL_{(DGBPS\ 1\text{-}2\ )} - UESO_{(DGBPS\text{-}II)})$$

If,

(i) Injection of DGBPS is less than Schedule, UI(dgbps) will be positive and DGBPS will be payable for compensating under injection in that respective 15 minute block.

(ii) Injection of DGBPS is higher than Schedule, UI(dgbps) will be negative and DGBPS will be receivable for compensating over injection in that respective 15 minute block

3. GANDHINAGAR THERMAL POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	120	120
2	120	120
3	210	210
4	210	210
5	210	210
TOTAL	870	870

⇨ Gandhinagar Generating station has separate Power Purchase Agreement for unit (1 to 4) and Unit 5. PPA of GTPS station is re-allocated by trading agency to distribution licensee separately for Unit (1to 4) and Unit 5. Therefore, Gandhinagar Generating Station is divided into two part for Unit 1 to4 and Unit 5 for all practical purpose.

⇨ Therefore, both part of Gandhinagar station is required to be treated as separate generating station and accordingly scheduling, metering and energy accounting methodology for both part of generating station i.e. for Unit 1 to 4 and Unit 5 is developed separately hereunder.

⇨ Regarding separation of auxiliary consumption between both parts of generating station, SLDC has intimated to GSECL for separation of auxiliary consumption. Till that, SLDC will approximate auxiliary consumption in proportion to output measured at GT(1-4) & GT-5.

A. METERING ARRANGEMENT :

Sr. No.	Type	Quantity
1	Main	10
2	Check	10
3	Stand By	9
	Total	29

Main (10 nos.) and Check (10 nos.) meters are installed at outgoing line and tie line between GTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT :

For Unit 1 To 4 :

Pool losses of Intra State Transmission Network: ***l % (****estimated by SLDC****)***
Net Ex-Bus Availability declaration of GTPS $_{(1\text{-}4)}$ in one block = ***DC*** $_{(GTPS\ 1\text{-}4)}$
Net Ex-Bus Injection Schedule of GTPS $_{(1\text{-}4)}$ in one block = ***SDL*** $_{(GTPS\ 1\text{-}4)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(GTPS\ 1\text{-}4)})$
$ENT_{(b2)} = (y/100 * DC_{(GTPS\ 1\text{-}4)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(GTPS\ 1\text{-}4)}) - (l/100 * x/100 * DC_{(GTPS\ 1\text{-}4)})$
$Ent_{(b2)} = (y/100 * DC_{(GTPS\ 1\text{-}4)}) - (l/100 * y/100 * DC_{(GTPS\ 1\text{-}4)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***GTPS (1-4)*** will be calculated for each 15 minute block as under:

$$SDL_{(GTPS1\text{-}4\ )} = [r1/100 * Ent_{(b1)}] + [r2/100 * Ent_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

For Unit 5 :

Pool losses of Intra State Transmission Network: ***l % (****estimated by SLDC****)***
Net Ex-Bus Availability declaration of GTPS $_{(5)}$ in one block = ***DC*** $_{(GTPS\ 5)}$
Net Ex-Bus Injection Schedule of GTPS $_{(5)}$ in one block = ***SDL*** $_{(GTPS\ 5)}$

Entitlement of ex-bus P/P of generating station of beneficiary =

$ENT_{(b1)} = (x/100 * DC_{(GTPS\ 5)})$ …….at ex-bus P/P
$ENT_{(b2)} = (y/100 * DC_{(GTPS\ 5)})$……..at ex-bus P/P

Entitlement of ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(GTPS\ 5)}) - (l/100 * x/100 * DC_{(GTPS\ 5)})$…….....at ex-P/P
$Ent_{(b2)} = (y/100 * DC_{(GTPS\ 5)}) - (l/100 * y/100 * DC_{(GTPS\ 5)})$……at ex-P/P
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1(%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***GTPS (1-4)*** will be calculated for each 15 minute block as under:

$SDL_{(GTPS\ 5)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}]$……(i)

C. ENERGY SENT OUT (ESO) OF GTPS (1-4) AND GTPS-5 : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$ESO_{(GTPS)} = \Sigma$ [OG (Ranasan-1) + OG (Ranasan -2) + OG (Jamla-1) + OG (Jamla -2) + OG (Soja-1) + OG (Soja -2) + OG (Chhatral-1) + OG (Chhatral-2) + OG (Mehsana-1) + OG (Mehsana-2)]…… (ii)

UESO of $GTPS_{(1-5)}$ =

$UESO_{(GTPS1-5)} = \Sigma$ [UESO (Unit ≠ 1)+ UESO (Unit ≠ 2)+ UESO (Unit ≠ 3)+ UESO (Unit ≠ 4)+ UESO (Unit ≠ 5)]……Output of Unit 1 to Unit 5

$(SAC_{(GTPS)}) = \Sigma$ Drawl of (ST-1 + ST-2A + ST-2B + ST-3)

Where,
ST-1 = SEM reading of Station Transformer No.1
ST-2 = SEM reading of Station Transformer No.2
ST-3 = SEM reading of Station Transformer No.3
ST-4 = SEM reading of Station Transformer No.4

For Unit 1 To 4 :

UESO of $GTPS_{(1-4)}$ =

$UESO_{(GTPS1-4)} = \Sigma$ [UESO (Unit ≠ 1)+ UESO (Unit ≠ 2)+ UESO (Unit ≠ 3)+ UESO (Unit ≠ 4)]……Output of Unit 1 to Unit 4

Where, *UESO(Unit # 1) = Output of Unit 1*
UESO(Unit # 2) = Output of Unit 2
UESO(Unit # 3) = Output of Unit 3
UESO(Unit # 4) = Output of Unit 4

Net Energy Sent Out GTPS $_{(1\text{-}4)}$

$$ESO_{(GTPS\ 1\text{-}4)} = UESO_{(GTPS1\text{-}4)} - [SAC_{(GTPS)}) * UESO_{(GTPS1\text{-}4)} / UESO_{(GTPS1\text{-}5)}]$$

For Unit 5

UESO of GTPS $_{(1\text{-}4)}$ =

$$UESO_{(GTPS5)} = \Sigma\ [UESO\ (Unit \neq 5) \ldots\ldots Output\ of\ Unit\#5$$

Where, *UESO(Unit # 5) = Output of Unit 5*

Net Energy Sent Out GTPS $_{(5)}$

$$ESO_{(GTPS\ 5)} = UESO_{(GTPS\ 5)} - [SAC_{(GTPS)}) * UESO_{(GTPS\text{-}5)} / UESO_{(GTPS1\text{-}5)}$$

D. UNSCHEDULED INTERCHANGE ENERGY (**:-** The net unscheduled interchange energy of Gandhinagar Station will be calculated separately for Unit 1-4 and Unit 5 for each 15 minute block.

Unscheduled Interchange energy for Unit 1 To 4 :

$$UI_{(GTPS1\text{-}4)} = \sum_{i=1}^{i=96} (SDL_{(GTPS1\text{-}4)} - ESO_{(GTPS1\text{-}4)})$$

If,
1. Injection of GTPS(1-4) is less than Schedule, UI will be positive and GTPS(1-4) will be payable for compensating under injection in that respective 15 minute block.

2. Injection of GTPS(1-4) is higher than Schedule, UI will be negative and GTPS(1-4) will be receivable for compensating over injection in that respective 15 minute block

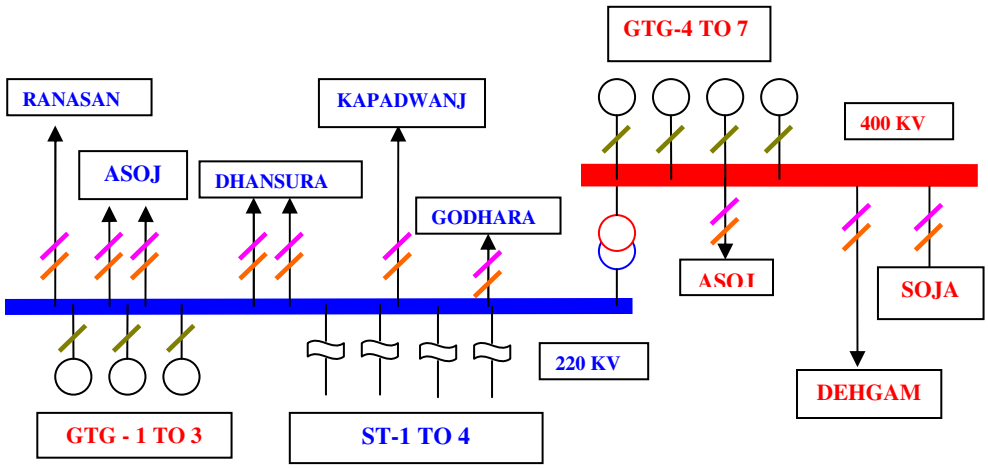
Unscheduled Interchange energy for Unit 5 :

$$UI_{(GTPS5)} = \sum_{i=1}^{i=96} (SDL_{(GTPS5)} - ESO_{(GTPS5)})$$

If,
1. Injection of GTPS(5) is less than Schedule, UI will be positive and GTPS(5) will be payable for compensating under injection in that respective 15 minute block.

2. Injection of GTPS(5) is higher than Schedule, UI will be negative and GTPS(5) will be receivable for compensating over injection in that respective 15 minute block

4. WANAKBORI THERMAL POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	210	210
2	210	210
3	210	210
4	210	210
5	210	210
6	210	210
7	210	210
TOTAL	1470	1470

- ⇨ Wanakbori Generating station has separate Power Purchase Agreement for unit (1 to 7) and Unit 7. PPA of WTPS station is re-allocated by trading agency to distribution licensee separately for Unit (1 to 6) and Unit 7. Therefore, Wanakbori Generating Station is divided into two part ; Part 1 as for Unit 1 to 6 and Part 2 as for Unit 5 for all practical purpose.

- ⇨ Therefore, both part of Wanakbori station is required to be treated as separate generating station and accordingly scheduling, metering and energy accounting methodology i.e. for Unit 1 to 6 and Unit 7 is developed separately hereunder.

- ⇨ Regarding separation of auxiliary consumption between both parts of generating station, SLDC has intimated to GSECL for separation of auxiliary consumption. Till that, SLDC will approximate auxiliary consumption in proportion to output measured at GT(1-6) & GT-7.

A. METERING ARRANGEMENT

Sr. No.	Type	Quantity
1	Main	11
2	Check	10
3	Stand By	12
	Total	33

Main (11 nos.) and Check (10 nos.) meters are installed at outgoing line and tie line between WTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

For Unit 1 To 6 :

Pool losses of Intra State Transmission Network: ***l % (estimated by SLDC)***
Net Ex-Bus Availability declaration of WTPS $_{(1-6)}$ in one block = ***DC*** $_{(WTPS\ 1-6)}$
Net Ex-Bus Injection Schedule of WTPS $_{(1-6)}$ in one block = ***SDL*** $_{(WTPS\ 1-6)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(WTPS\ 1-6)})$
$ENT_{(b2)} = (y/100 * DC_{(WTPS\ 1-6)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(WTPS\ 1-6)}) - (l/100 * x/100 * DC_{(WTPS\ 1-6)})$
$Ent_{(b2)} = (y/100 * DC_{(WTPS\ 1-6)}) - (l/100 * y/100 * DC_{(WTPS\ 1-6)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***WTPS (1-6)*** will be calculated for each 15 minute block as under:

$$SDL_{(WTPS1\text{-}6)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

For Unit 7 :

Pool losses of Intra State Transmission Network: ***l % (estimated by SLDC)***
Net Ex-Bus Availability declaration of WTPS $_{(7)}$ in one block = ***DC*** $_{(WTPS\ 7)}$
Net Ex-Bus Injection Schedule of WTPS $_{(7)}$ in one block = ***SDL*** $_{(WTPS\ 7)}$

Entitlement of ex-bus P/P of generating station of beneficiary =

$ENT_{(b1)} = (x/100 * DC_{(WTPS\ 7)})$ *…….at ex-bus P/P*
$ENT_{(b2)} = (y/100 * DC_{(WTPS\ 7)})$*……..at ex-bus P/P*

Entitlement of ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(WTPS\ 7)}) - (l/100 * x/100 * DC_{(WTPS\ 7)})$*…….at ex-P/P*
$Ent_{(b2)} = (y/100 * DC_{(WTPS\ 7)}) - (l/100 * y/100 * DC_{(WTPS\ 7)})$*……at ex-P/P*
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1(%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***WTPS (7)*** will be calculated for each 15 minute block as under:

$$SDL_{(WTPS\ 5)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

D. ENERGY SENT OUT (ESO) OF WTPS (1-6) AND WTPS-7 : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$ESO_{(WTPS)}$ = Σ [OG (Ranasan-1) + OG (Godhara -1) + OG (Asoj-1) + OG (Asoj -2) + OG (Dhansura-1) + OG (Dhansura -2) + OG (K'wanj-1)+ OG(400 KV-Asoj)+ OG (Dehgam-1)+ OG (Soja-1)]

UESO of $WTPS_{(1-7)}$ =

$UESO_{(WTPS1-7)}$ = *Σ [UESO (Unit ≠ 1)+ UESO (Unit ≠ 2)+ UESO (Unit ≠ 3) + UESO (Unit ≠ 4)+ UESO (Unit ≠ 5) + UESO (Unit ≠ 6)+ + UESO (Unit ≠ 7)]……Output of Unit 1 to 7*

$(SAC_{(GTPS)})$ = *Σ Drawl of (ST-1 + ST-2 + ST-3 + ST-4)*

Where,

ST-1 = SEM reading of Station Transformer No.1
ST-2 = SEM reading of Station Transformer No.2
ST-3 = SEM reading of Station Transformer No.3
ST-4 = SEM reading of Station Transformer No.4

For Unit 1 To 6 :

UESO of $WTPS_{(1-6)}$ =

$UESO_{(WTPS1-6)}$ = *Σ [UESO (Unit ≠ 1)+ UESO (Unit ≠ 2)+ UESO (Unit ≠ 3)+ UESO (Unit ≠ 4)+ UESO (Unit ≠ 5) + UESO (Unit ≠ 6)]……Output of Unit 1 to 6*

Where,
UESO(Unit # 1) = Output of Unit 1
UESO(Unit # 2) = Output of Unit 2
UESO(Unit # 3) = Output of Unit 3
UESO(Unit # 4) = Output of Unit 4
UESO(Unit # 5) = Output of Unit 5
UESO(Unit # 6) = Output of Unit 6

Net Energy Sent Out $WTPS_{(1-6)}$

$$ESO_{(WTPS\ 1-6)} = UESO_{(WTPS1-6)} - [SAC_{(WTPS)} * UESO_{(WTPS1-6)} / UESO_{(WTPS1-7)}]$$

For Unit 7

UESO of WTPS $_{(7)}$ $= UESO_{(WTPS\ 7)} = \Sigma$ [UESO (Unit ≠ 7)…….Output of Unit#7

Where, UESO(Unit # 7) = Output of Unit 7(including auxiliary Consumption)

Net Energy Sent Out WTPS $_{(7)}$:

$$ESO_{(WTPS\ 7)} = UESO_{(WTPS\ 7)} - [SAC_{(WTPS)} * UESO_{(WTPS\text{-}7)} / UESO_{(WTPS1\text{-}7)}]$$

E. UNSCHEDULED INTERCHANGE ENERGY :- The net unscheduled interchange energy of Wanakbori station will be calculated separately for Unit 1-6 and Unit 7 for each 15 minute block.

Unscheduled Interchange energy for Unit 1 To 6 :

$$UI_{(WTPS1\text{-}6)} = (SDL_{(WTPS1\text{-}6)} - ESO_{(WTPS1\text{-}6)})$$

If,
1. Injection of WTPS(1-6) is less than Schedule, UI will be positive and WTPS(1-6) has to payable for compensating under injection in that respective 15 minute block.

2. Injection of WTPS(1-6) is higher than Schedule, UI will be negative and WTPS(1-6) will be receivable for compensating over injection in that respective 15 minute block

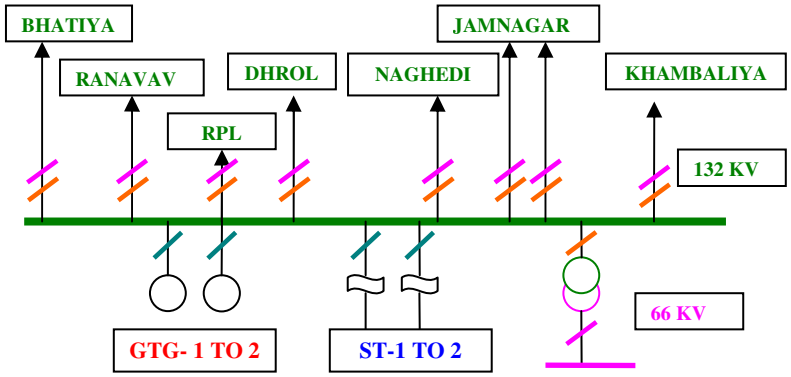
Unscheduled Interchange energy for Unit 7 :

$$UI_{(WTPS\text{-}7)} = (SDL_{(WTPS\text{-}7)} - ESO_{(WTPS\ 7)})$$

If,
1. Injection of WTPS(7) is less than Schedule, UI will be positive and WTPS(7) will be payable for compensating under injection in that respective 15 minute block.

2. Injection of WTPS(7) is higher than Schedule, UI will be negative and WTPS(7) will be receivable for compensating over injection in that respective 15 minute block

5. SIKKA THERMAL POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	120	120
2	120	120
TOTAL	240	240

A. METERING ARRANGEMENT

Sr. No	Type	Quantity
1	Main	7
2	Check	6
3	Stand By	5
	Total	18

Main (07 nos.) and Check (06 nos.) meters are installed at outgoing line and tie line between STPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***l % (estimated by SLDC)***
Net Ex-Bus Availability declaration of STPS $_{(1-2)}$ in one block = ***DC*** $_{(STPS\ 1-2)}$
Net Ex-Bus Injection Schedule of STPS $_{(1-2)}$ in one block = ***SDL*** $_{(STPS\ 1-2)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(STPS\ 1-2)})$
$ENT_{(b2)} = (y/100 * DC_{(STPS\ 1-2)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(STPS\ 1-2)}) - (l/100 * x/100 * DC_{(STPS\ 1-2)})$
$Ent_{(b2)} = (y/100 * DC_{(STPS\ 1-2)}) - (l/100 * y/100 * DC_{(STPS\ 1-2)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block). Therefore, net ex-bus injection schedule of ***STPS (1-2)*** will be calculated for each 15 minute block as under:

$$SDL_{(STPS1-2)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT (ESO) OF STPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(STPS)} = \Sigma [OG (Bhatiya-1) + OG (Dhrol -1) + OG (RPL-1) + OG (Ranavav -1) + OG (Jamnagar-2) + OG (Nagedi-1) + OG (ICT-1)]$$

……..(ii)

Alternate,

$$ESO_{(STPS)} = \Sigma [ESO (Unit \neq 1) + ESO (Unit \neq 2)] - \Sigma [Drawl of (ST-1 + ST-2)]$$

Where, *ESO (Unit ≠ 1) = Output of Unit # 1*
ESO(Unit # 2) = Output of Unit # 2

D. UNSCHEDULED ENERGY : The net unscheduled interchange energy of Sikka power station will be calculated for each 15 minute block as under :.

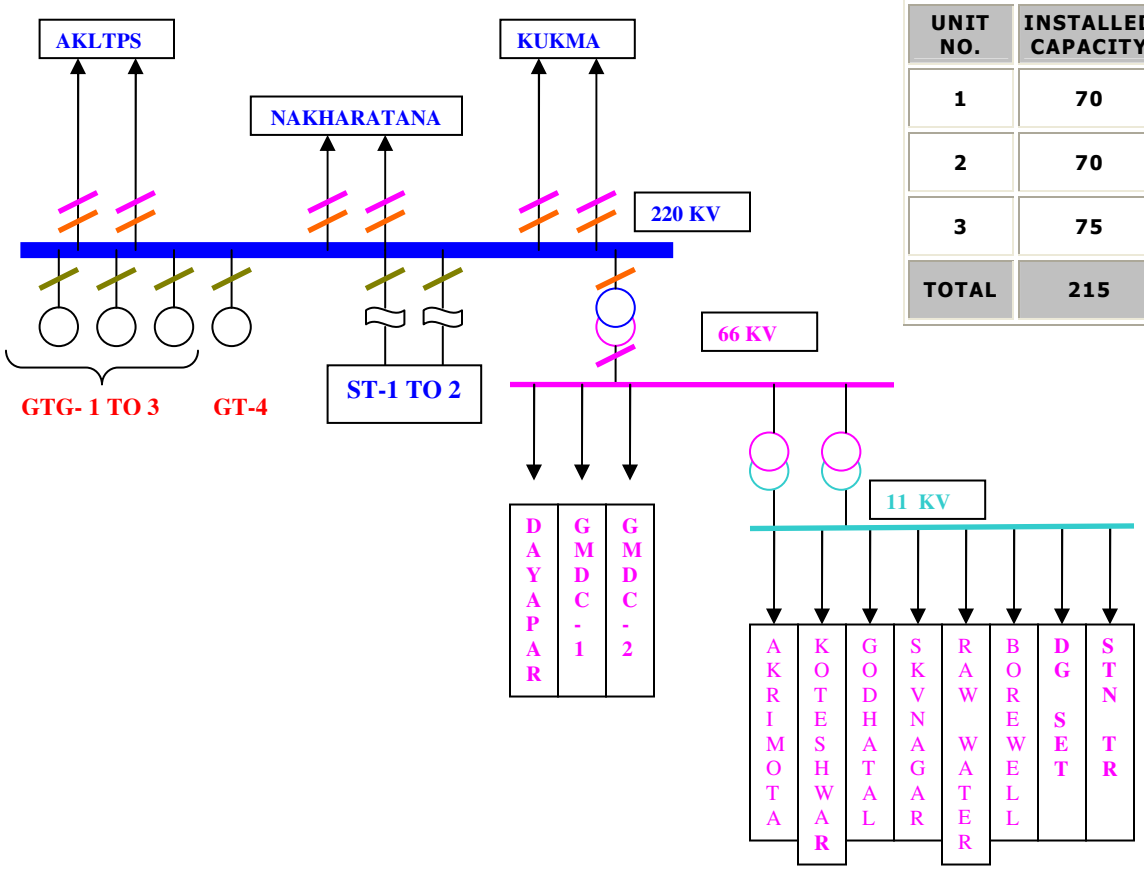
$$UI_{(STPS1-6)} = (SDL_{(STPS)} - ESO_{(STPS)})$$

If,

1. Injection of STPS is less than Schedule, UI will be positive and STPS has to payable for compensating under injection in that respective 15 minute block.

2. Injection of STPS is higher than Schedule, UI will be negative and STPS will be receivable for compensating over injection in that respective 15 minute block

6.0 KUTCH LIGNITE THERMAL POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	70	70
2	70	70
3	75	75
TOTAL	215	215

⇨ KLTPS Generating station has separate Power Purchase Agreement for unit (1 to 3) and Unit 4. PPA of KLTPS station is re-allocated by trading agency to distribution licensee separately for Unit (1 to 3) and Unit 4. Therefore, KLTPS Generating Station is divided into two part ; Part 1 as for Unit 1 to 3 and Part 2 as for Unit 4.

⇨ Therefore, both part of KLTPS station is required to be treated as separate generating station while formulating scheduling, metering and energy accounting methodology i.e. for Unit 1 to 3 and Unit 4 is developed separately hereunder.

A. METERING ARRANGEMENT :

Sr. No.	Type	Quantity
1	Main	7
2	Check	6
3	Stand By	7
	Total	20

Main (07 nos.) and Check (06 nos.) meters are installed at outgoing line and tie line between KLTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

For Unit 1 To 3 :

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of KLTPS $_{(1-3)}$ in one block = ***DC*** $_{(KLTPS1-3)}$
Net Ex-Bus Injection Schedule of KLTPS $_{(1-3)}$ in one block = ***SDL*** $_{(KLTPS1-3)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(KLTPS1-3)})$
$ENT_{(b2)} = (y/100 * DC_{(KLTPS1-3)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(KLTPS1-3)}) - (l/100 * x/100 * DC_{(KLTPS1-3)})$
$Ent_{(b2)} = (y/100 * DC_{(KLTPS1-3)}) - (l/100 * y/100 * DC_{(KLTPS1-3)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***KLTPS (1-3)*** will be calculated for each 15 minute block as under:

$$SDL_{(KLTPS1-3)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

For Unit 4 :

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of KLTPS $_{(4)}$ in one block = ***DC*** $_{(KLTPS\ 4)}$
Net Ex-Bus Injection Schedule of KLTPS $_{(4)}$ in one block = ***SDL*** $_{(KLTPS\ 4)}$

Entitlement of ex-bus P/P of generating station of beneficiary =

$ENT_{(b1)} = (x/100 * DC_{(KLTPS\ 4)})$ *…….at ex-bus P/P*
$ENT_{(b2)} = (y/100 * DC_{(KLTPS\ 4)})$*……..at ex-bus P/P*

Entitlement of ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(KLTPS\ 4)}) - (l/100 * x/100 * DC_{(KLTPS\ 4)})$*…….....at ex-P/P*
$Ent_{(b2)} = (y/100 * DC_{(KLTPS\ 4)}) - (l/100 * y/100 * DC_{(KLTPS\ 4)})$*……at ex-P/P*
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1(%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***KLTPS (4)*** will be calculated for each 15 minute block as under:

$$SDL_{(KLTPS\ 4)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT (ESO) OF KLTPS (1-3) AND KLTPS-4 : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$ESO_{(KLTPS)}$ = Σ [OG (Akrimota -1) + OG (Akrimota -2 + OG (Nakhatrana-1) + OG (Nakhatrana -2) + OG (Kukma-1) + OG (Kukma -2)]

UESO of $KLTPS_{(1-4)}$ =

$UESO_{(KLTPS1-4)}$ = *Σ [UESO (Unit ≠ 1)+ UESO (Unit ≠ 2)+ UESO (Unit ≠ 3)+ UESO (Unit ≠ 4)]……Output of Unit 1 to 4*

$(SAC_{(KLTPS)})$ = *Σ Drawl of (ST-1 + ST-2)*

Where,
ST-1 = SEM reading of Station Transformer No.1
ST-2 = SEM reading of Station Transformer No.2

<u>For Unit 1 To 3 :</u>

UESO of $KLTPS_{(1-3)}$ =

$UESO_{(KLTPS1-3)}$ = *Σ [UESO (Unit ≠ 1)+ UESO (Unit ≠ 2)+ UESO (Unit ≠ 3)]……Output of Unit 1 to 3*

Where, UESO(Unit # 1) = Output of Unit 1
UESO(Unit # 2) = Output of Unit 2
UESO(Unit # 3) = Output of Unit 3

Net Energy Sent Out $KLTPS_{(1-3)}$

$$ESO_{(KLTPS\ 1-3)} = UESO_{(KLTPS1-3)} - [SAC_{(KLTPS)} * UESO_{(KLTPS\ 1-3)} / UESO_{(KLTPS1-4)}]$$

<u>For Unit 4</u>

UESO of $KLTPS_{(4)}$ = $UESO_{(KLTPS\ 4)}$ = *Σ [UESO (Unit ≠ 4)…….Output of Unit#4*

Where, UESO(Unit # 4) = Output of Unit4(including auxiliary Consumption)

Net Energy Sent Out WTPS $_{(4)}$:

$$ESO_{(KLTPS\ 4)} = UESO_{(KLTPS\ 4)} - [SAC_{(KLTPS)} * UESO_{(KLTPS\ 4)} / UESO_{(KLTPS1\text{-}4)}]$$

D. **UNSCHEDULED INTERCHANGE ENERGY: -** The net unscheduled interchange energy of Wanakbori station will be calculated separately for Unit 1-6 and Unit 7 for each 15 minute block.

Unscheduled Interchange energy for Unit 1 To 3:

$$UI_{(KLTPS1\text{-}3)} = (SDL_{(KLTPS1\text{-}3)} - ESO_{(KLTPS1\text{-}3)})$$

If,

1. Injection of KLTPS(1-3) is less than Schedule, UI will be positive and KLTPS(1-3) has to payable for compensating under injection in that respective 15 minute block.

2. Injection of KLTPS (1-3) is higher than Schedule, UI will be negative and KLTPS (1-3) will be receivable for compensating over injection in that respective 15 minute block

Unscheduled Interchange energy for Unit 4 :

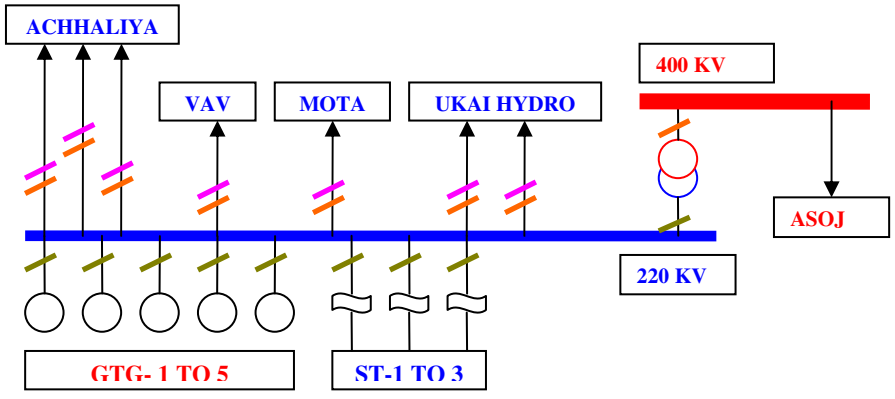
$$UI_{(KLTPS\text{-}4)} = (SDL_{(KLTPS\text{-}4)} - ESO_{(KLTPS\ 4)})$$

If,

1. Injection of KLTPS(4) is less than Schedule, UI will be positive and KLTPS(4) will be payable for compensating under injection in that respective 15 minute block.

2. Injection of KLTPS(4) is higher than Schedule, UI will be negative and KLTPS(4) will be receivable for compensating over injection in that respective 15 minute block

7.0 UKAI THERMAL POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	120	120
2	120	120
3	200	200
4	200	200
5	210	210
TOTAL	850	850

A. METERING ARRANGEMENT :

Sr. No.	Type	Quantity
1	Main	8
2	Check	7
3	Stand By	9
	Total	24

Main (08 nos.) and Check (07 nos.) meters are installed at outgoing line and tie line between UTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of UTPS in one block = ***DC*** $_{(UTPS)}$
Net Ex-Bus Injection Schedule of UTPS in one block = ***SDL*** $_{(UTPS)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(UTPS)})$
$ENT_{(b2)} = (y/100 * DC_{(UTPS)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(UTPS)}) - (l/100 * x/100 * DC_{(UTPS)})$
$Ent_{(b2)} = (y/100 * DC_{(UTPS)}) - (l/100 * y/100 * DC_{(UTPS)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***UTPS*** will be calculated for each 15 minute block as under:

$$SDL_{(UTPS)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT (ESO) OF UTPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(UTPS)} = \Sigma [OG (Achhaliya-1) + OG (Achhaliya -2) + OG (Achhaliya -3) + OG (VAV-1) + OG(Mota-1)+OG (UHPS-1)+OG (UHPS-2) +OG(ICT-400KV-1)]$$

……(ii)

Alternately,

$$ESO_{(UTPS))} = \Sigma [ESO (Unit \neq 1) + ESO (Unit \neq 2) + ESO (Unit \neq 3) + ESO (Unit \neq 4) + ESO (Unit \neq 5)] - \Sigma [Drawl of (ST\text{-}1 + ST\text{-}2 + ST\text{-}3)]$$

D. UNSCHEDULED ENERGY : The net unscheduled interchange energy of Ukai power station will be calculated for each 15 minute block as under :.

$$UI_{(UTPS)} = (SDL_{(UTPS)} - ESO_{(UTPS)})$$

If,

1. Injection of UTPS is less than Schedule, UI will be positive and UTPS has to payable for compensating under injection in that respective 15 minute block.

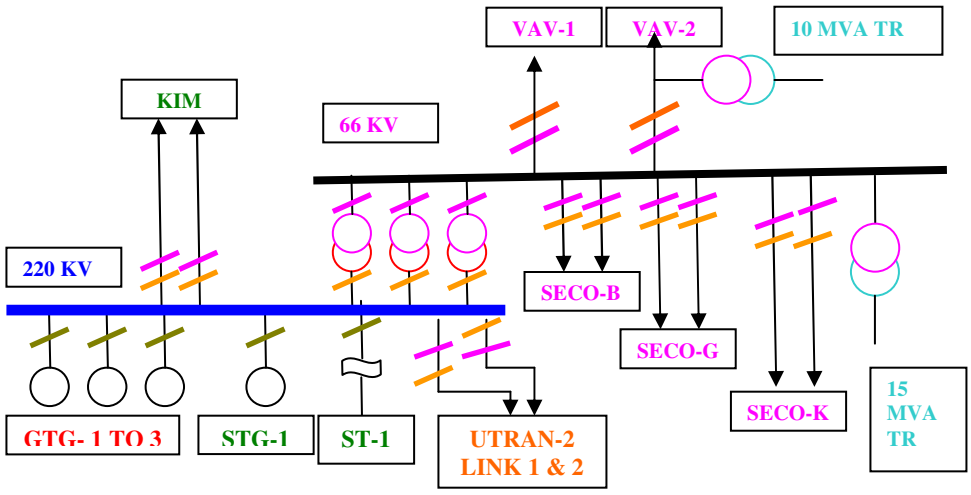
2. Injection of UTPS is higher than Schedule, UI will be negative and UTPS will be receivable for compensating over injection in that respective 15 minute block

8.0 UTRAN GAS BASED POWER STATION:

⇨ UGBP (509 MW) Generating station has separate Power Purchase Agreement for unit (1 to 3) and Unit 4. PPA of UGBPS station is re-allocated by trading agency to distribution licensee separately for UGBP(135 MW) and UGBP EXT(374 MW). Therefore, UGBPS Generating Station is divided into two part ; Part 1 as for UGBP and Part 2 as for UUGBP EXT.

⇨ Therefore, both part of UGBPS station is required to be treated as separate generating station while formulating scheduling, metering and energy accounting methodology i.e. for UGBPS and UGBP EXT is developed separately hereunder

PART 1 : UTRAN GAS BASED STAGE-1 (135 MW) POWER STATION :



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
GT-1	30	30
GT-2	30	30
GT-3	30	30
STG	45	45
TOTAL	135	135

A. METERING ARRANGEMENT :

Sr. No.	Type	Quantity
1	Main	15
2	Check	15
3	Stand By	5
	Total	35

Main (15 nos.) and Check (15 nos.) meters are installed at outgoing line and tie line between KLTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of UGBPS in one block = ***DC*** *(UGBPS)*
Net Ex-Bus Injection Schedule of UGBPS in one block = ***SDL*** *(UGBPS)*

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(UGBPS)})$
$ENT_{(b2)} = (y/100 * DC_{(UGBPS)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(UGBPS)}) - (l/100 * x/100 * DC_{(UGBPS)})$
$Ent_{(b2)} = (y/100 * DC_{(UGBPS)}) - (l/100 * y/100 * DC_{(UGBPS)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***UGBPS*** will be calculated for each 15 minute block as under:

$SDL_{(UGBPS1-3)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}]$……(i)

C. ENERGY SENT OUT (ESO) OF UGBPS: The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$ESO_{(UGBPS)} = \boldsymbol{ESO}_{(UGBPS)} = \Sigma$ [OG (Kim-1) + OG (Kim -2) + OG(ICT-220 KV-1)+ OG(ICT-220 KV-2) OG(ICT-220 KV-3)+ OG(Utran-EXT-1) + OG(Utran-EXT-2)]

Alternately,

UESO of UGBPS =
$UESO_{(UGBPS)} = \Sigma$ [UESO (Unit ≠ GT1)+ UESO (Unit ≠ GT2)+ UESO (Unit ≠ GT3)+ UESO (Unit ≠ STG)] - Σ [ST-1]……. ……Output of GT & STG

Where, *UESO(Unit # GT) = Output of GT*
UESO(Unit #STG) = Output of STG

D. UNSCHEDULED INTERCHANGE ENERGY :- The net unscheduled interchange energy of UGBPS station will be calculated for each 15 minute block.

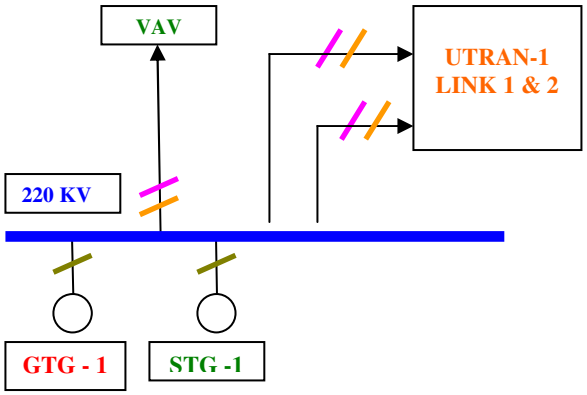
$\boldsymbol{UI_{(UGBPS)} = (SDL_{(UGBPS)} - ESO_{(UGBPS)})}$

If,

1. Injection of UGBPS is less than Schedule, UI will be positive and UGBPS has to payable for compensating under injection in that respective 15 minute block.

2. Injection of UGBPS is higher than Schedule, UI will be negative and UGBPS will be receivable for compensating over injection in that respective 15 minute block

PART 2: UTRAN GAS BASED STAGE-2 (374 MW) POWER STATION :



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
GT-1	30	30
STG	45	45
TOTAL	135	135

A. METERING ARRANGEMENT :

Sr. No.	Type	Quantity
1	Main	3
2	Check	3
3	Stand By	2
	Total	8

Main (03 nos.) and Check (03 nos.) meters are installed at outgoing line and tie line between KLTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of UGBPS EXT in one block = ***DC*** *(UGBPS EXT)*
Net Ex-Bus Injection Schedule of UGBPS EXT in one block = ***SDL*** *(UGBPS EXT)*

Entitlement of ex-bus P/P of generating station of beneficiary =

$ENT_{(b1)} = (x/100 * DC_{(UGBPS\ EXT)})$ .....at ex-bus P/P
$ENT_{(b2)} = (y/100 * DC_{(UGBPS\ EXT)})$.....at ex-bus P/P

Entitlement of ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(UGBPS\ EXT)}) - (l/100 * x/100 * DC_{(UGBPS\ EXT)})$.....at ex-P/P
$Ent_{(b2)} = (y/100 * DC_{(UGBPS\ EXT)}) - (l/100 * y/100 * DC_{(UGBPS\ EXT)})$.....at ex-P/P

.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1(%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***UGBPS (EXT)*** will be calculated for each 15 minute block as under:

$$SDL_{(UGBPS\ EXT)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT (ESO) OF UGBPS: The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(UGBPS\ EXT)} = \Sigma [OG\ (Vav\ -1) + OG\ (Utran\text{-}Old\text{-}1) + OG\ (Utran\text{-}Old\text{-}2)] \ldots\ldots\ldots\ldots (ii)$$

Alternately,

UESO of UGBPS =
$$UESO_{(UGBPS)} = \Sigma\ [UESO\ (Unit \neq GT1) + UESO\ (Unit \neq STG)]$$

……Output of GT & STG

Where, UESO(Unit # GT1) = Output of GT1
UESO(Unit #STG) = Output of STG

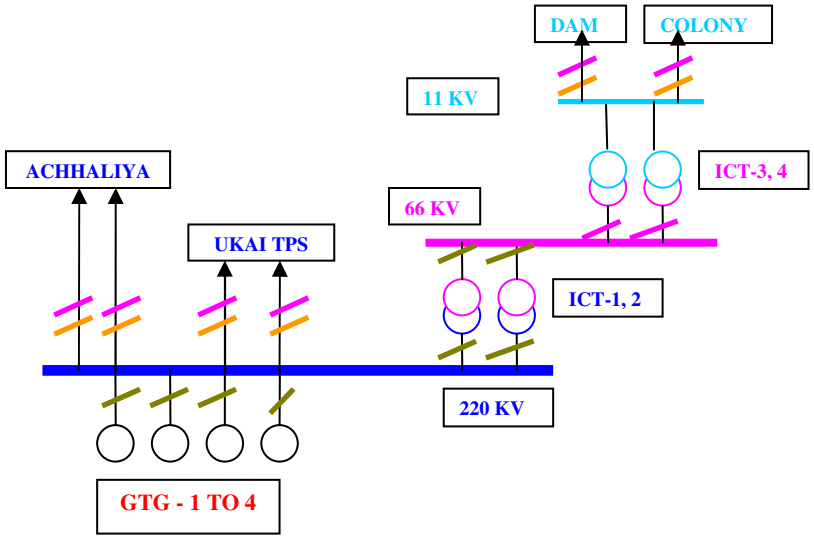
D. UNSCHEDULED INTERCHANGE ENERGY: - The net unscheduled interchange energy of UGBPS EXT station will be calculated for each 15 minute block.

$$UI_{(UGBPS\ EXT)} = (SDL_{(UGBPS\ EXT)} - ESO_{(UGBPS\ EXT)})$$

If,
1. Injection of UGBPS EXT is less than Schedule, UI will be positive and UGBPS EXT has to payable for compensating under injection in that respective 15 minute block.

2. Injection of UGBPS EXT is higher than Schedule, UI will be negative and UGBPS EXT will be receivable for compensating over injection in that respective 15 minute block

9.0 UKAI HYDRO POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	75	75
2	75	75
3	75	75
4	75	75
TOTAL	300	300

A. METERING ARRANGEMENT :

Sr. No.	Type	Quantity
1	Main	8
2	Check	4
3	Stand By	8
	Total	20

Main (08 nos.) and Check (04 nos.) meters are installed at outgoing line and tie line between UHPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

A. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of UHPS in one block = ***DC*** $_{(UHPS)}$
Net Ex-Bus Injection Schedule of UHPS in one block = ***SDL*** $_{(UHPS)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(UHPS)})$
$ENT_{(b2)} = (y/100 * DC_{(UHPS)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(UHPS)}) - (l/100 * x/100 * DC_{(UHPS)})$
$Ent_{(b2)} = (y/100 * DC_{(UHPS)}) - (l/100 * y/100 * DC_{(UHPS)})$
.
.
And so on…

Where, x= allocation of beneficiary 1

Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ***UHPS*** will be calculated for each 15 minute block as under:

$$SDL_{(UHPS)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

B. ENERGY SENT OUT (ESO) OF UHPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(UHPS)} = \Sigma [OG(Achhaliya\text{-}1) + OG(Achhaliya\text{-}2) + OG(Ukai\ TPS\text{-}1) + OG(Ukai\ TPS\text{-}2) + OG(ICT\text{-}1\text{-}200\ KV) + OG(ICT\text{-}2\text{-}200\ KV) - OG(ICT\text{-}3\text{-}66\ KV) - OG(ICT\text{-}4\text{-}66\ KV) + OG(Dam\text{-}1) + OG(Colony\text{-}1)] \ldots\ldots\ldots\ldots\ldots\ldots (II)$$

Alternately,

$$ESO_{(UHPS))} = \Sigma [ESO\ (Unit \neq 1) + ESO\ (Unit \neq 2) + ESO\ (Unit \neq 3) + ESO\ (Unit \neq 4)]$$

C. UNSCHEDULED ENERGY : The net unscheduled interchange energy of Ukai power station will be calculated for each 15 minute block as under :.

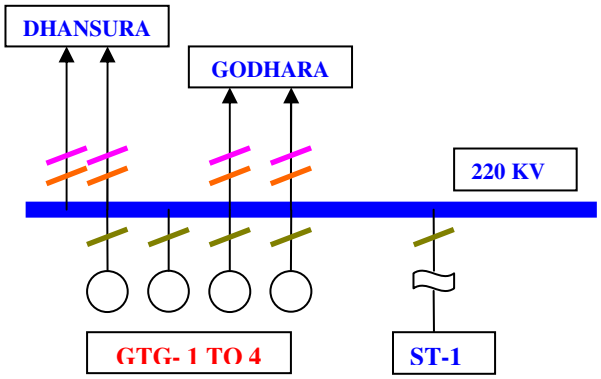
$$UI_{(UHPS)} = (SDL_{(UHPS)} - ESO_{(UHPS)})$$

If,

1. Injection of UHPS is less than Schedule, UI will be positive and UHPS has to payable for compensating under injection in that respective 15 minute block.

2. Injection of UHPS is higher than Schedule, UI will be negative and UHPS will be receivable for compensating over injection in that respective 15 minute block

10.0 KADANA HYDRO POWER STATION:



UNIT NO.	INSTALLED CAPACITY	DERATED CAPACITY
1	60	60
2	60	60
3	60	60
4	60	60
TOTAL	240	240

A. METERING ARRANGEMENT

Sr. No.	Type	Quantity
1	Main	4
2	Check	4
3	Stand By	5
	Total	13

Main (04 nos.) and Check (04 nos.) meters are installed at outgoing line and tie line between KHPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of KHPS in one block = ***DC*** $_{(KHPS)}$
Net Ex-Bus Injection Schedule of KHPS in one block = ***SDL*** $_{(KHPS)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(KHPS)})$
$ENT_{(b2)} = (y/100 * DC_{(KHPS)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(KHPS)}) - (l/100 * x/100 * DC_{(KHPS)})$
$Ent_{(b2)} = (y/100 * DC_{(KHPS)}) - (l/100 * y/100 * DC_{(KHPS)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block).

Therefore, net ex-bus injection schedule of ***KHPS*** will be calculated for each 15 minute block as under:

$$SDL_{(UHPS)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT (ESO) OF KHPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(khps)} = \Sigma [OG(Dhansura\text{-}1) + OG(Dhansura\text{-}2) + OG(Godhara\text{-}1) + OG(Godhara\text{-}2)]$$

……..(ii)

Alternately,

$$UESO_{(khps)} = \Sigma [ESO(Unit \neq 1) + ESO(Unit \neq 2) + ESO(Unit \neq 3) + ESO(Unit \neq 4) - ESO(ST \neq 1)]$$

D. UNSCHEDULED ENERGY : The net unscheduled interchange energy of Kadana power station will be calculated for each 15 minute block as under :.

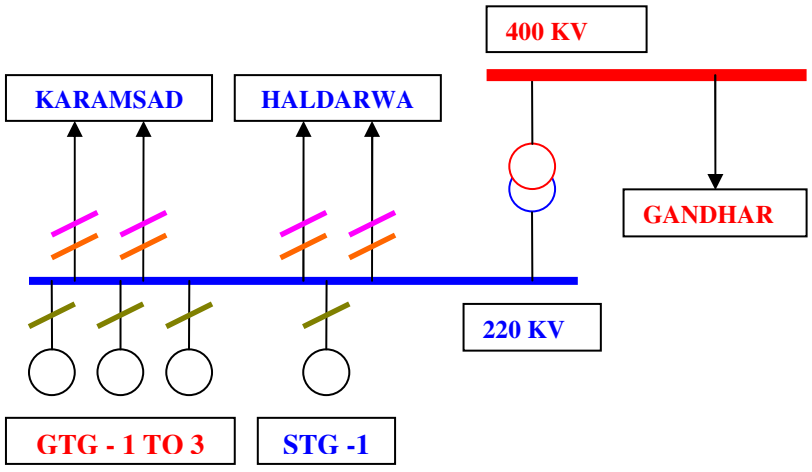
$$UI_{(KHPS)} = (SDL_{(KHPS)} - ESO_{(KHPS)})$$

If,

1. Injection of KHPS is less than Schedule, UI will be positive and KHPS has to payable for compensating under injection in that respective 15 minute block.

2. Injection of KHPS is higher than Schedule, UI will be negative and KHPS will be receivable for compensating over injection in that respective 15 minute block

10.0 GUJARAT PAGUTHAN ELECTRICITY COMPANY LTD:



A. METERING ARRANGEMENT

Sr. No	Type	Quantity
1	Main	5
2	Check	5
3	Stand By	4
	Total	14

Main (05 nos.) and Check (05 nos.) meters are installed at outgoing line and tie line between GPEC generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT

Pool losses of Intra State Transmission Network: ***l % (estimated by SLDC)***
Net Ex-Bus Availability declaration of GPEC in one block = $DC_{(GPEC)}$
Net Ex-Bus Injection Schedule of GPEC in one block = $SDL_{(GPEC)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(GPEC)})$
$ENT_{(b2)} = (y/100 * DC_{(GPEC)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(GPEC)}) - (l/100 * x/100 * DC_{(GPEC)})$
$Ent_{(b2)} = (y/100 * DC_{(GPEC)}) - (l/100 * y/100 * DC_{(GPEC)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block). Therefore, net ex-bus injection schedule of GPEC will be calculated for each 15 minute block as under:

$$SDL_{(GPEC)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

In case of gas turbine generating station or a combined cycle generating station, scheduled generation will required to be corrected with respect to average frequency, scheduled generation and declaration of generating station of that station. Therefore, scheduled generation is corrected as under :

$$PFSDL_{(GPEC)} = (\text{frequency correction factor}) \times SDL_{(GPEC)} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

Where, frequency correction factor is to be considered as per the definition of "**Scheduled Generation**" in tariff regulation issued by Hon'ble commission.

C. **ENERGY SENT OUT (ESO) OF GPEC :** The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(gpec)} = \Sigma\ [OG(Karamsad\text{-}1) + OG(Karamsad\text{-}2) + OG(Haldarwa\text{-}1) + OG(Haldarwa\text{-}2)]$$
$$OG(IBT\text{-}1)$$

Alternatively,

$$UESO_{(gpec)} = \Sigma\ [ESO\ (Unit \neq 1) + ESO\ (Unit \neq 2) + ESO\ (Unit \neq 3) + ESO\ (STG\text{-}1)]$$

D. **UNSCHEDULED ENERGY** : The net unscheduled interchange energy of Kadana power station will be calculated for each 15 minute block as under :.

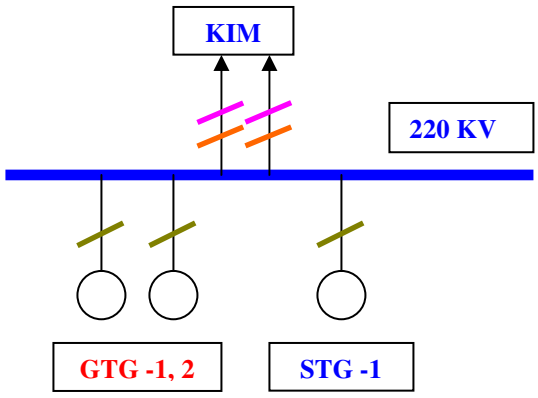
$$\boldsymbol{UI_{(GPEC)} = (SDL_{(GPEC)} - ESO_{(GPEC)})}$$

If,

1. Injection of GPEC is less than Schedule, UI will be positive and GPEC has to payable for compensating under injection in that respective 15 minute block.

2. Injection of GPEC is higher than Schedule, UI will be negative and GPEC will be receivable for compensating over injection in that respective 15 minute block

11.0 GUJARAT STATE ELECTRICY GENERATION LTD:



A. METERING ARRANGEMENT :

Sr. No	Type	Quantity
1	Main	2
2	Check	2
3	Stand By	3
	Total	7

Main (02 nos.) and Check (02 nos.) meters are installed at outgoing line and tie line between GSEG generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT :

Pool losses of Intra State Transmission Network: ***l % (estimated by SLDC)***
Net Ex-Bus Availability declaration of GSEG in one block = ***DC*** $_{(GSEG)}$
Net Ex-Bus Injection Schedule of GSEG in one block = ***SDL*** $_{(GSEG)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(GSEG)})$
$ENT_{(b2)} = (y/100 * DC_{(GSEG)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(GSEG)}) - (l/100 * x/100 * DC_{(GSEG)})$
$Ent_{(b2)} = (y/100 * DC_{(GSEG)}) - (l/100 * y/100 * DC_{(GSEG)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of GPEC will be calculated for each 15 minute block as under:

$$SDL_{(GSEG)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

In case of gas turbine generating station or a combined cycle generating station, scheduled generation will required to be corrected with respect to average frequency, scheduled generation and declaration of generating station of that station. Therefore, scheduled generation is corrected as under :

$$PFSDL_{(GSEG)} = (\text{frequency correction factor}) \times SDL_{(GSEG)} \ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

Where, frequency correction factor is to be considered as per the definition of "**Scheduled Generation**" in tariff regulation issued by Hon'ble commission.

C. ENERGY SENT OUT OF GSEG : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(gpec)} = \Sigma\ [OG(Kim\text{-}1) + OG(Kim\ \text{-}2)]$$

Alternatively,

$$UESO_{(gpec)} = \Sigma\ [ESO\ (Unit \neq 1) + ESO\ (Unit \neq 2) + ESO\ (STG\text{-}1)]$$

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of Kadana power station will be calculated for each 15 minute block as under :.

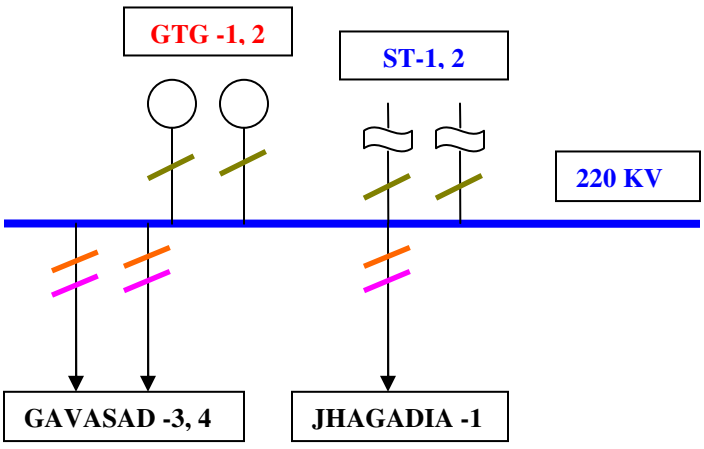
$$UI_{(GSEG)} = (SDL_{(GSEG)} - ESO_{(GSEG)})$$

If,

1. Injection of GSEG is less than Schedule, UI will be positive and GSEG has to payable for compensating under injection in that respective 15 minute block.

2. Injection of GSEG is higher than Schedule, UI will be negative and GSEG will be receivable for compensating over injection in that respective 15 minute block

12 SURAT LIGNITE POWER PLANT (PHASE-I):



A. METERING ARRANGEMENT :

Sr. No	Type	Quantity
1	Main	3
2	Check	3
3	Stand By	4
	Total	10

Main (03 nos.) and Check (03 nos.) meters are installed at outgoing line and tie line between SLPP generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT:

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of SLPP in one block = ***DC*** $_{(SLPP)}$
Net Ex-Bus Injection Schedule of SLPP in one block = ***SDL*** $_{(SLPP)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(SLPP)})$
$ENT_{(b2)} = (y/100 * DC_{(SLPP)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(SLPP)}) - (l/100 * x/100 * DC_{(SLPP)})$
$Ent_{(b2)} = (y/100 * DC_{(SLPP)}) - (l/100 * y/100 * DC_{(SLPP)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block). Therefore, net ex-bus injection schedule of GPEC will be calculated for each 15 minute block as under:

$$SDL_{(SLPP)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT OF SLPP: The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$ESO_{(SLPP)} = \Sigma [OG(Gavasad-3) + OG(Gavasad-4) + OG(Jhagadia-1]$

Alternatively,

$UESO_{(SLPP)} = \Sigma [ESO(Unit \neq 1) + ESO(Unit \neq 2)] - (SAC_{(SLPP)})$

($SAC_{(SLPP)}$) = Σ Drawl of (ST-1 + ST-2)
Where,
ST-1 = SEM reading of Station Transformer No.1
ST-2 = SEM reading of Station Transformer No.2

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of SLPP power station will be calculated for each 15 minute block as under :.

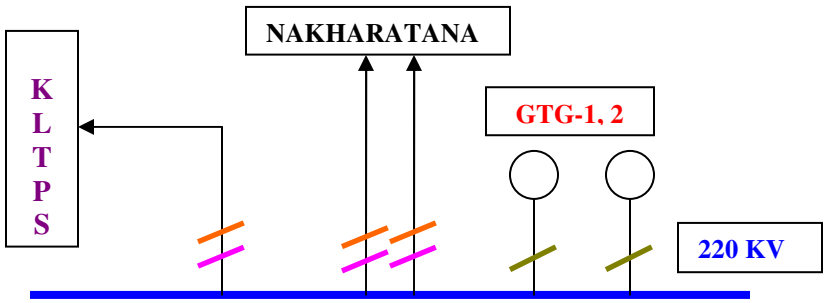
$$UI_{(SLPP)} = (SDL_{(SLPP)} - ESO_{(SLPP)})$$

If,

1. Injection of SLPP is less than Schedule, UI will be positive and SLPP has to payable for compensating under injection in that respective 15 minute block.

2. Injection of SLPP is higher than Schedule, UI will be negative and SLPP will be receivable for compensating over injection in that respective 15 minute block

13 AKRIMOTA THERMAL POWER STATIONS:



A. METERING ARRANGEMENT:

Sr. No	Type	Quantity
1	Main	3
2	Check	3
3	Stand By	2
	Total	8

Main (03 nos.) and Check (03 nos.) meters are installed at outgoing line and tie line between ALTPS generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT:

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of ALTPS in one block = ***DC*** $_{(ALTPS)}$

Net Ex-Bus Injection Schedule of ALTPS in one block = $SDL_{(ALTPS)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(ALTPS)})$
$ENT_{(b2)} = (y/100 * DC_{(ALTPS)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(ALTPS)}) - (l/100 * x/100 * DC_{(ALTPS)})$
$Ent_{(b2)} = (y/100 * DC_{(ALTPS)}) - (l/100 * y/100 * DC_{(ALTPS)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of ALTPS will be calculated for each 15 minute block as under:

$$SDL_{(ALTPS)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT OF ALTPS : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$ESO_{(ALTPS)} = \Sigma [OG(Nakhatrana\text{-}1) + OG(Nakhatrana\text{-}2) + OG(KLTPS\text{-}1)]$

Alternatively,

$UESO_{(ALTPS)} = \Sigma [ESO (Unit \neq 1) + ESO (Unit \neq 2)]$

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of ALTPS power station will be calculated for each 15 minute block as under :.

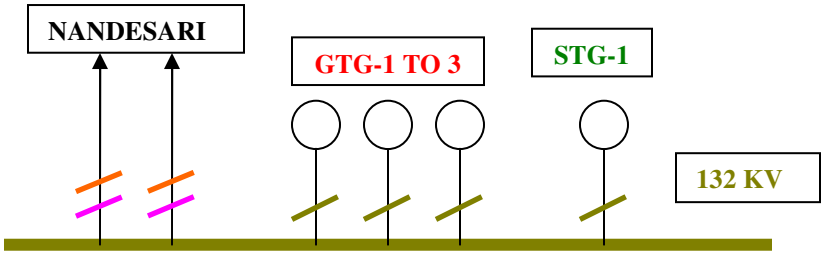
$$UI_{(ALTPS)} = (SDL_{(ALTPS)} - ESO_{(ALTPS)})$$

If,

1. Injection of SLPP is less than Schedule, UI will be positive and SLPP has to payable for compensating under injection in that respective 15 minute block.

2. Injection of SLPP is higher than Schedule, UI will be negative and SLPP will be receivable for compensating over injection in that respective 15 minute block

14. GUJARAT INDUSTRIAL POWER CORPORATION LTD – STAGE 1:



A. METERING ARRANGEMENT :

Sr. No	Type	Quantity
1	Main	2
2	Check	2
3	Stand By	4
	Total	8

Main (02 nos.) and Check (02 nos.) meters are installed at outgoing line and tie line between GIPCL-I generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT:

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of GIPCL-1 in one block = ***DC*** $_{(GIPCL-1)}$
Net Ex-Bus Injection Schedule of GIPCL-1 in one block = ***SDL*** $_{(GIPCL-1)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(GIPCL-1)})$
$ENT_{(b2)} = (y/100 * DC_{(GIPCL-1)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(GIPCL-1)}) - (l/100 * x/100 * DC_{(GIPCL-1)})$
$Ent_{(b2)} = (y/100 * DC_{(GIPCL-1)}) - (l/100 * y/100 * DC_{(GIPCL-1)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block). Therefore, net ex-bus injection schedule of GIPCL-1 will be calculated for each 15 minute block as under:

$$SDL_{(GIPCL-1)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

In case of gas turbine generating station or a combined cycle generating station, scheduled generation will required to be corrected with respect to average frequency, scheduled generation and declaration of generating station of that station. Therefore, scheduled generation is corrected as under :

$$PFSDL_{(GIPCL-1)} = (\text{frequency correction factor}) \times SDL_{(GIPCL-1)} \quad \ldots\ldots\ldots\ldots\ldots\ldots\text{(ii)}$$

Where, frequency correction factor is to be considered as per the definition of "**Scheduled Generation**" in tariff regulation issued by Hon'ble commission.

C. ENERGY SENT OUT OF GIPCL-1 : The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(GIPCL-1)} = \Sigma\,[OG(Nandesari\text{-}1) + OG(Nandesari\text{-}2)]$$

Alternatively,

$$UESO_{(GIPCL-1)} = \Sigma\,[ESO\,(Unit \neq 1) + ESO\,(Unit \neq 2) + ESO\,(Unit \neq 3) + ESO\,(STG\text{-}1)]$$

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of ALTPS power station will be calculated for each 15 minute block as under :.

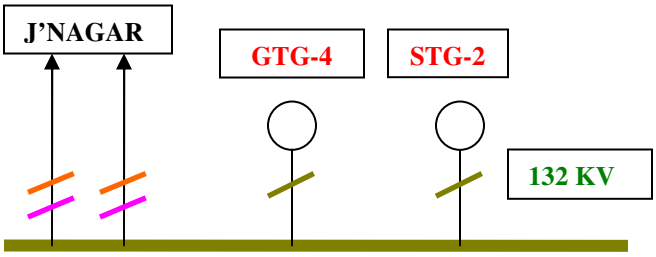
$$UI_{(GIPCL-1)} = (SDL_{(GIPCL-1)} - ESO_{(GIPCL-1)})$$

If,

1. Injection of GIPCL-1 is less than Schedule, UI will be negative and GIPCL-1 has to payable for compensating under injection in that respective 15 minute block.

2. Injection of GIPCL-1 is higher than Schedule, UI will be positive and GIPCL-1 will be receivable for compensating over injection in that respective 15 minute block

14. GUJARAT INDUSTRIAL POWER CORPORATION LTD – STAGE 2:



A. METERING ARRANGEMENT:

Sr. No	Type	Quantity
1	Main	2
2	Check	2
3	Stand By	2
	Total	6

Main (02 nos.) and Check (02 nos.) meters are installed at outgoing line and tie line between GIPCL-2 generating stations.

Stand by meters are installed at Generating Transformers. The four meters are installed on station transformers which will be used to measure auxiliary consumption.

B. SCHEDULING ARRANGEMENT:

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of GIPCL-2 in one block = ***DC*** $_{(GIPCL-2)}$
Net Ex-Bus Injection Schedule of GIPCL-2 in one block = ***SDL*** $_{(GIPCL-2)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(GIPCL-2)})$
$ENT_{(b2)} = (y/100 * DC_{(GIPCL-2)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(GIPCL-2)}) - (l/100 * x/100 * DC_{(GIPCL-2)})$
$Ent_{(b2)} = (y/100 * DC_{(GIPCL-2)}) - (l/100 * y/100 * DC_{(GIPCL-2)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block). Therefore, net ex-bus injection schedule of GIPCL-2 will be calculated for each 15 minute block as under:

$$SDL_{(GIPCL-2)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

In case of gas turbine generating station or a combined cycle generating station, scheduled generation will required to be corrected with respect to average frequency, scheduled generation and declaration of generating station of that station. Therefore, scheduled generation is corrected as under :

$$PFSDL_{(GIPCL-2)} = (\text{frequency correction factor}) \times SDL_{(GIPCL-2)} \ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

Where, frequency correction factor is to be considered as per the definition of "**Scheduled Generation**" in tariff regulation issued by Hon'ble commission.

C. ENERGY SENT OUT OF GIPCL-2: The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$ESO_{(GIPCL-2)} = \Sigma [OG(J'nagar-3) + OG(J'nagar-4)]$$

Alternatively,

$$UESO_{(GIPCL-2)} = \Sigma [ESO(Unit \neq 4) + ESO(STG-2)]$$

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of ALTPS power station will be calculated for each 15 minute block as under :.

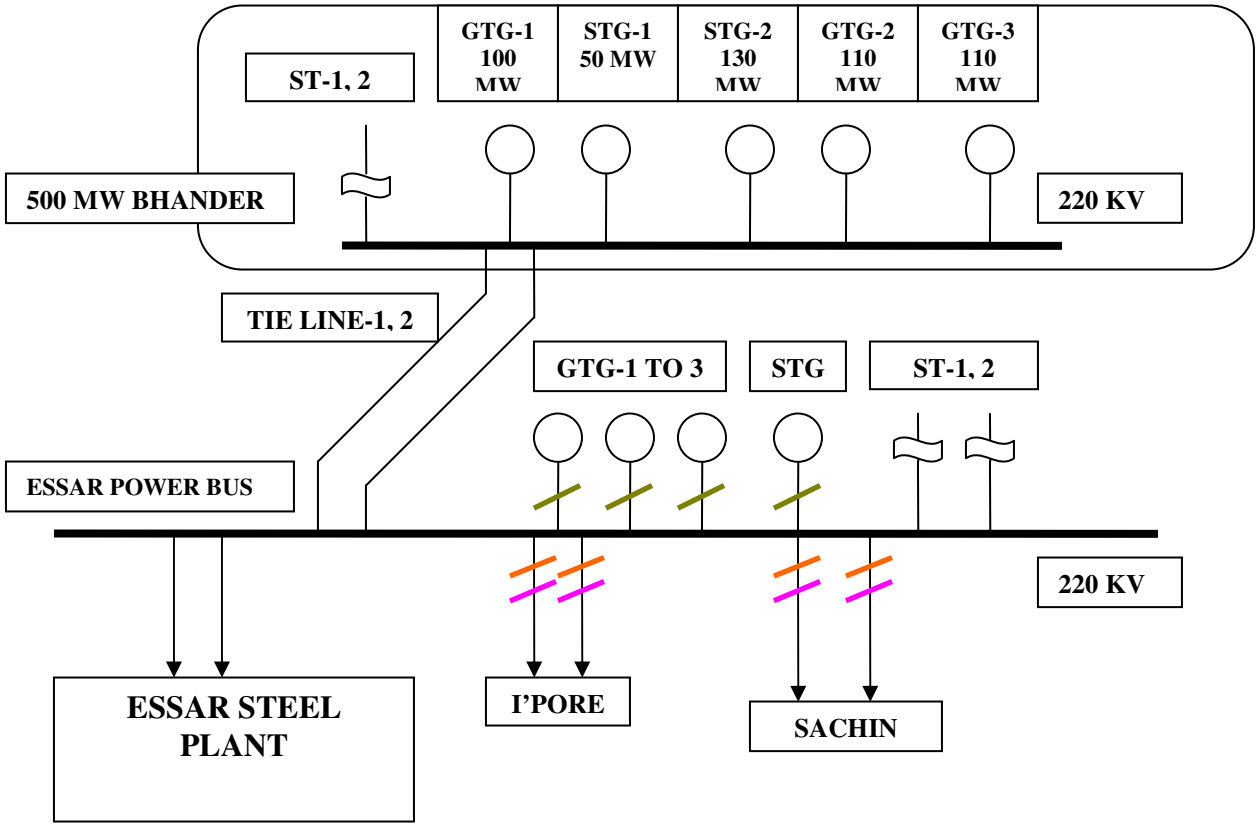
$$UI_{(GIPCL-2)} = (SDL_{(GIPCL-2)} - ESO_{(GIPCL-2)})$$

If,

1. Injection of GIPCL-2 is less than Schedule, UI will be negative and GIPCL-2 has to payable for compensating under injection in that respective 15 minute block.

2. Injection of GIPCL-2 is higher than Schedule, UI will be positive and GIPCL-2 will be receivable for compensating over injection in that respective 15 minute block

15. ESSAR POWER LTD (515 MW) :



A. METERING ARRANGEMENT:

Sr. No	Type	Quantity
1	Main	4
2	Check	4
3	Stand By	4
	Total	12

B. SCHEDULING ARRANGEMENT:

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of EPOL in one block = ***DC*** $_{(EPOL)}$
Net Ex-Bus Injection Schedule of EPOL in one block = ***SDL*** $_{(EPOL)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(EPOL)})$
$ENT_{(b2)} = (y/100 * DC_{(EPOL)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(EPOL)}) - (l/100 * x/100 * DC_{(EPOL)})$
$Ent_{(b2)} = (y/100 * DC_{(EPOL)}) - (l/100 * y/100 * DC_{(EPOL)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of **EPOL** will be calculated for each 15 minute block as under:

$$SDL_{(EPOL)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

In case of gas turbine generating station or a combined cycle generating station, scheduled generation will required to be corrected with respect to average frequency, scheduled generation and declaration of generating station of that station. Therefore, scheduled generation is corrected as under :

$$PFSDL_{(EPOL)} = (\text{frequency correction factor}) \times SDL_{(EPOL)} \ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

Where, frequency correction factor is to be considered as per the definition of "**Scheduled Generation**" in tariff regulation issued by Hon'ble commission.

C. ENERGY SENT OUT OF EPOL: The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

Before installation of ABT meter:

$$UESO_{(EPOL)} = \Sigma [ESO(Unit \neq GT\ 1) + ESO(Unit \neq GT\ 2) + ESO(Unit \neq GT\ 3) + ESO(Unit\ \#STG)] - [\{ESO(Unit \neq GT\ 1) + ESO(Unit \neq GT\ 2) + ESO(Unit \neq GT\ 3) + ESO(Unit\ \#STG)\} * 97/100] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

After installation of ABT meter:

$$UESO_{(EPOL)} = \Sigma [ESO(Unit \neq GT\ 1) + ESO(Unit \neq GT\ 2) + ESO(Unit \neq GT\ 3) + ESO(Unit\ \#STG)] - \sum[(ST\text{-}1) + (ST\text{-}2)] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of ALTPS power station will be calculated for each 15 minute block as under :.

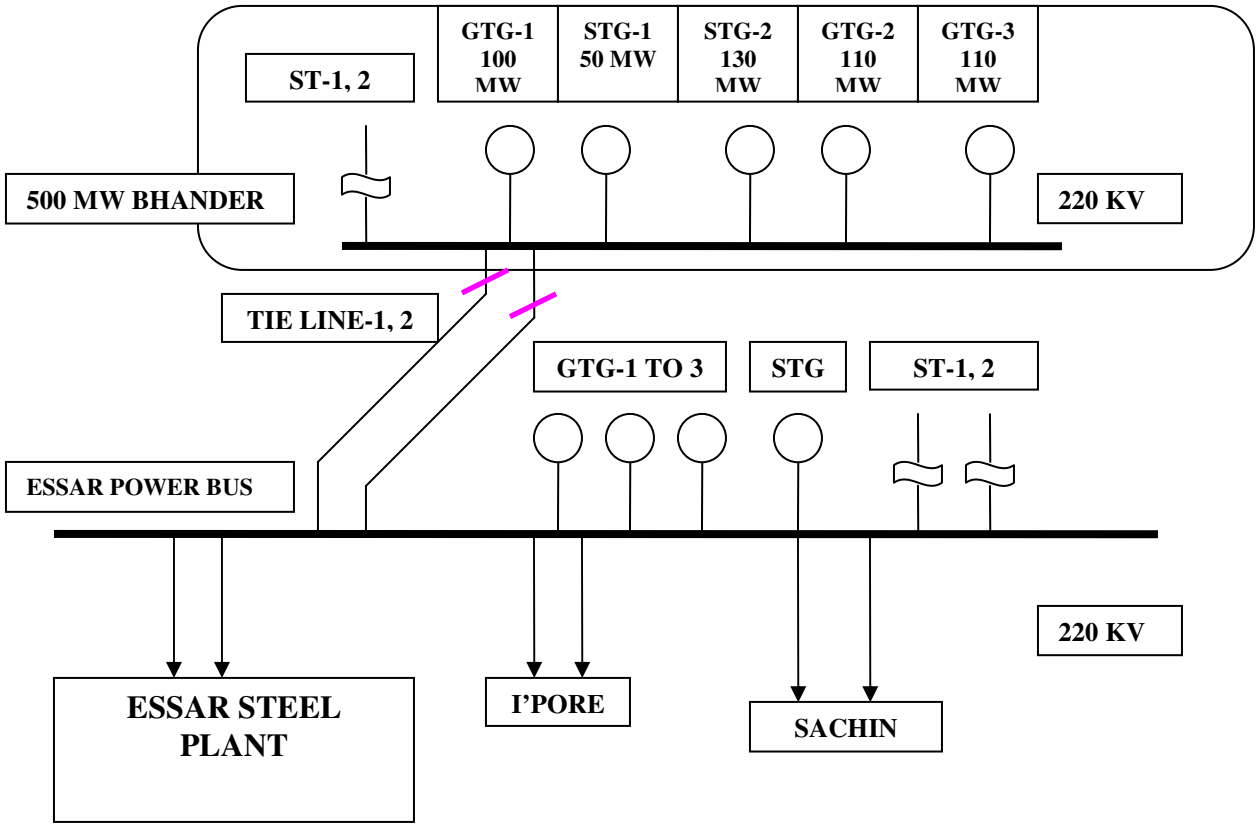
$$UI_{(EPOL)} = (SDL_{(EPOL)} - ESO_{(EPOL)})$$

If,

1. Injection of EPOL is less than Schedule, UI will be positive and EPOL has to payable for compensating under injection in that respective 15 minute block.

2. Injection of EPOL is higher than Schedule, UI will be negative and EPOL will be receivable for compensating over injection in that respective 15 minute block

16. BHANDAR POWER LTD (505 MW) :



A. METERING ARRANGEMENT:

Sr. No	Type	Quantity
1	Main	2
2	Check	0
3	Stand By	5
	Total	7

B. SCHEDULING ARRANGEMENT:

Pool losses of Intra State Transmission Network: ***I % (estimated by SLDC)***
Net Ex-Bus Availability declaration of BPL in one block = ***DC*** $_{(BPL)}$
Net Ex-Bus Injection Schedule of BPL in one block = ***SDL*** $_{(BPL)}$

Entitlement of beneficiary at ex-bus P/P of Generating station =

$ENT_{(b1)} = (x/100 * DC_{(BPL)})$
$ENT_{(b2)} = (y/100 * DC_{(BPL)})$
.

Entitlement of beneficiary at ex-P/P of beneficiary =

$Ent_{(b1)} = (x/100 * DC_{(BPL)}) - (l/100 * x/100 * DC_{(BPL)})$
$Ent_{(b2)} = (y/100 * DC_{(BPL)}) - (l/100 * y/100 * DC_{(BPL)})$
.
.
And so on…

Where, x= allocation of beneficiary 1
Y= allocation of beneficiary 2

Let's requisition of each beneficiary be ***r1 (%), r2(%)*** of its entitlement (for each block)**.** Therefore, net ex-bus injection schedule of **BPL** will be calculated for each 15 minute block as under:

$$SDL_{(BPL)} = [r1/100 * ENT_{(b1)}] + [r2/100 * ENT_{(b2)}] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

C. ENERGY SENT OUT OF BPL: The net ex-bus energy sent out from the generating station will be calculated as summation of net energy metered by SEM installed for each 15 minute block :

$$UESO_{(BPL)} = \Sigma [OG (Link\text{-}1) + OG (Link\text{-}2)]] \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

D. UNSCHEDULED INTERCHANGE ENERGY : The net unscheduled interchange energy of ALTPS power station will be calculated for each 15 minute block as under :.

$$UI_{(BPL)} = (SDL_{(BPL)} - ESO_{(BPL)})$$

If,

1. Injection of BPL is less than Schedule, UI will be positive and BPL has to payable for compensating under injection in that respective 15 minute block.

2. Injection of BPL is higher than Schedule, UI will be negative and BPL will be receivable for compensating over injection in that respective 15 minute block