

4.2(c) Net Injection by NLC TS-II Stg. 1 & 2

Sl. No.	Point of Injection	Feeder/ICT/GTs/TTs	Main Meter	Check Meter, if any	Standby Meter	Remarks
1	Neyveli TS-II Stg. I & II	230 kV side of GT-1	(NL-01)	(NL-21)		
		230 kV side of GT-2	(NL-02)	(NL-22)		
		230 kV side of GT-3	(NL-03)	(NL-23)		
		400 kV side of GT-4	(NL-04)	(NL-24)		
		400 kV side of GT-5	(NL-05)	(NL-25)		
		400 kV side of GT-6	(NL-06)	(NL-26)		
		400 kV side of GT-7	(NL-07)	(NL-27)		
		230 kV side of ST-1	(NL-08)	(NL-28)		
		230 kV side of ST-2	(NL-09)	(NL-29)		
		230 kV side of ST-3	(NL-10)	(NL-30)		
		230 kV side of ST-4	(NL-11)	(NL-31)		
		230kV side of MF-1	(NL-12)	(NL-32)		
		230kV side of MF-2	(NL-13)	(NL-33)		
		230kV side of MF-3	(NL-14)	(NL-34)		
		230kV side of MF-4	(NL-15)	(NL-35)		

Note : SEMS installed by NLC are used for computations

a) Using Main meters :

NLC TS-II(I) Gross Generation

$$(NY-01)^* = (NL-01)+(NL-02)+(NL-03)$$

NLC TS-II(II) Gross Generation

$$(NY-02)^* = (NL-04)+(NL-05)+(NL-06)+(NL-07)$$

Total Gross Generation

$$(NY-03)^* = ((NY-01)+(NY-02))$$

Total Auxiliary Consumption

$$(NY-04)^* = (NL-08)+(NL-09)+(NL-10)+(NL-11)$$

Auxiliary Consumption apportioned to NLC-II(Stage-I)

$$(NY-05)^* = (NY-04)(NY-01)/(NY-03)$$

Auxiliary Consumption apportioned to NLC-II(Stage-II)

$$(NY-06)^* = (NY-04)(NY-02)/(NY-03)$$

Injection by NLC-TS-II(Stage-I)

$$(NV-G1)^* = (NY-01) - (NY-05)$$

Injection by NLC-TS-II(Stage-II)

$$(NV-G2)^* = (NY-02) - (NY-06)$$

NLC Mines-I allocation from NLC-II St-I

$$(M1-AL)^* = (NV-G1)*0.0794$$

NLC Mines-I allocation from NLC-II St-II

$$(M2-AL)^* = (NV-G2)*0.0595$$

NLC Mines-I total allocation from NLC-II

$$(MT-AL)^* = (M1-AL)+(M2-AL)$$

Total drawal by NLC Mines

$$(NM-94)^* = (NL-12)+(NL-13)+(NL-14)+(NL-15)$$

Drawal by NLC Mines from NLC-II St-I

$$(M1-AC)^* = (NM-94)*(M1-AL)/(MT-AL)$$

Drawal by NLC Mines from NLC-II St-II

$$(M2-AC)^* = (NM-94)*(M2-AL)/(MT-AL)$$

Net Injection by NLC-TS-II(Stage-I)

$$(NV-91)^* = (NV-G1)-(M1-AC)$$

Net Injection by NLC-TS-II(Stage-II)

$$(NV-92)^* = (NV-G2)-(M2-AC)$$

* Fictitious meters created for computations.

(b) Using Check meters :

NLC TS-II(I) Gross Generation

$$(NY-C1)^* = (NL-21)+(NL-22)+(NL-23)$$

NLC TS-II(II) Gross Generation

$$(NY-C2)^* = (NL-24)+(NL-25)+(NL-26)+(NL-27)$$

Total Gross Generation

$$(NY-C3)^* = ((NY-C1)+(NY-C2))$$

Total Auxiliary Consumption

$$(NY-C4)^* = (NL-28)+(NL-29)+(NL-30)+(NL-31)$$

Auxiliary Consumption apportioned to NLC-II(Stage-I)

$$(NY-C5)^* = (NY-C4)(NY-C1)/(NY-C3)$$

Auxiliary Consumption apportioned to NLC-II(Stage-II)

$$(NY-C6)^* = (NY-C4)(NY-C2)/(NY-C3)$$

Injection by NLC-TS-II(Stage-I)

$$(NC-G1)^* = (NY-C1) - (NY-C5)$$

Injection by NLC-TS-II(Stage-II)

$$(NC-G2)^* = (NY-C2) - (NY-C6)$$

NLC Mines-I allocation from NLC-II St-I

$$(C1-AL)^* = (NC-G1) \times 0.0794$$

NLC Mines-I allocation from NLC-II St-II

$$(C2-AL)^* = (NC-G2) \times 0.0595$$

NLC Mines-I total allocation from NLC-II

$$(CT-AL)^* = (C1-AL)+(C2-AL)$$

Total drawal by NLC Mines

$$(NM-95)^* = (NL-12)+(NL-13)+(NL-14)+(NL-15)$$

Drawal by NLC Mines from NLC-II St-I

$$(C1-AC)^* = (NM-95) \times (C1-AL)/(CT-AL)$$

Drawal by NLC Mines from NLC-II St-II

$$(C2-AC)^* = (NM-95) \times (C2-AL)/(CT-AL)$$

Net Injection by NLC-TS-II(Stage-I)

$$(NC-91)^* = (NC-G1)-(C1-AC)$$

Net Injection by NLC-TS-II(Stage-II)

$$(NC-92)^* = (NC-G2)-(C2-AC)$$

* Fictitious meters created for computations.