

S.No. 102	GMR Kamalanga Energy Limited	SEPCO Ref Doc No: KTPP-OT-SEPC-GKEL-0377 dated 09.09.2010				
	1050 MW Kamalanga Thermal Power Project	LII Ref : LII/GGN/7234/09/0275				
Date : 13-09-2010	Comment Resolution (BCD Rows)	GKEL Ref No.: GKEL/EPC/SEPCO/10/203 Dated 26.03.10				
S. No.	SEPCO Doc. Ref. & Description	GKEL/ LII comment dated 26.03.10	Resolution between GKEL/LII and SEPCO / SNPDI on 20/04/10 at Beijing	SEPCO Doc. Ref. & Description	GKEL/ LII comment dated 13.09.10	Resolution between GKEL/LII and SEPCO / SNPDI on 13/09/10 at Beijing
A	General comments valid for all the drawings:	Approval Category: C for all drawings	Approval Category: A for all drawings	Foundation of Main Power Building @ Column Line B,C,D	General Comments	37-F4341S-T0302 Foundation of MPB @ col.line B,C,D Approval Category: A for all drawings
1		Responsibility for conformity of design and drawings with the relevant G.A drawing, design documents and data rests with SEPCO and in case of any deviation, the same will be rectified by M/S SEPCO without any commercial implications to GKEL.	SEPCO agree to execute as per the contract and relevant MOM.		Responsibility for conformity of design and drawings with the relevant G.A drawing, design documents and data rests with SEPCO and in case of any deviation, the same will be rectified by M/S SEPCO without any commercial implications to GKEL.	SEPCO agree to execute as per the contract and relevant MOM.
2		In the absence of analysis results and design calculations, The adequacy of the pedestal, shear wall, beam & foundation sizes and their reinforcement could not be reviewed. SEPCO is requested to submit design calculation as early as possible. In general design calculations should be submitted before submittal of the related drawings so that all the agreed comments of the design document can be incorporated in the drawings. In this way review process of both design as well as drawings can be reduced.	SEPCO / SNPDI produced inputs for STAAD model, loading calculations and output results of STAAD analysis. Design calculations for foundations and pedestals have been submitted and reviewed by GKEL/ LII at Beijing. a) Dead loads, live loads, earthquake loads and wind loads, considered in STAAD model are in line with the calculations. b) Value of Major Equipment loadings have been verified from supplier equipment loading drawings. Equipments loading drawings are in Chinese language, therefore SEPCO / SNPDI agreed for the correctness of loads considered for the analysis. c) Design of foundations and pedestals have been done based on Chinese codes which found generally in line and satisfy the requirements.		SEPCO to note that the foundations at column line B, C & D of first 3 units had already been approved under 3x350 MW system in which two layers of underlying soil/rock had been considered i.e. Layers IV & V whose SBC were 500 kPa and 800 kPa respectively. However it has been observed that in the revised drawings only layer V has been considered with SBC 800 kPa. Also the 4th unit foundations have been added in the volume. Apart from this please note that there are many changes in the levels and bracing system in Main Power Building's latest superstructure drawings (Volume No. T0313). Consequently the support reactions are likely to be changed considerably. Hence all the revised foundation design as well as the design calculations for the 4th unit foundations are to reviewed for approval. SEPCO to submit the same and ensure that at site all the foundations shall rest on the rock layer with an SBC of 800 kPa.	SEPCO / SNPDI produced output of revised STAAD analysis of units 1 to 3 and of unit 4. Design calculations for additional foundations and pedestals for unit 4 have been submitted and reviewed by GKEL/ LII at Beijing. SEPCO / SNPDI also informed as below: a) 4th unit is just an additional unit in continuation of 1 to 3. b) No change in the inputs (loadings) for STAAD analysis. c) Depth of footings at row 'D' has been increased for avoiding clashing of coal mill foundation. On row 'C' dowels have been provided to connect reinforcement of wall and raft of coal mill foundation. d) Typical foundations designed for critical loadings have been used in 4th unit also. e) In the revised drawings only layer V has been considered with SBC 800 kPa as is per Geotechnical Investigation Report. SEPCO submitted Geotechnical report for unit 4 for verification. The details have been verified in the drawings and found that the details and type of foundations are same as they are used for other 1 to 3 units.
3		Refer cl. No. 1.1.5, xxiv, Part-D EPC Technical specification, SEPCO to provide the quantities of steel reinforcement and concrete in the construction drawings. SEPCO is requested to include the same in all the drawings.	SEPCO clarified that SEPCO site civil engineer will provide Steel and concrete quantity in work instruction for each drawing. GKEL/LII noted		SEPCO to note that SEPCO's site office has not provided quantities of the previously approved documents so far. Therefore, SEPCO is requested to take necessary action for the same and instruct its site staff to clear all back log and ensure to provide quantities for all upcoming documents/drawings.	SEPCO assured that SEPCO site office will provide Steel and concrete quantity in work instruction for each drawing.
B	General Specification 37-F4341S-T0302-01 Rev 0	Approval Category: C	Approval Category: A	General Specification 37-F4341S-T0302-01 Rev B	Approval Category: C	General Specification 37-F4341S-T0302-01 Rev B Approval Category: A
1	General Specification 37-F4341S-T0302-02 Rev 0	Design grade of foundation has not been mentioned similar to the note 1 of column line (A) foundation drg no F4341S-T0301-01, Rev 0. Please provide the same. Also specify the referred code for the same.	The required code furnished in Design calculation submitted by SEPCO and issue closed		Noted. Issue Closed.	Noted. Issue Closed.
2		Mention the Indian / Chinese codes as well as the reference drawings in the specifications.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
3		Refer note 2. (a) Please note that in the first sentence 2 different values of soil's bearing capacity have been mentioned i.e. 500 & 800 kPa, while there is only one soil layer i.e. (IV) (Moderately weathered stone (sand stone) or slightly weathered stone). If one of these SBC values belongs to the soil layer (V) then please mention it respectively. (b) Also in this note the soil layers (V) has been mentioned. In the absence of the Geotechnical Investigation Report, the design instructions 37-F4341C-T-01 Rev B has been referred. But as per this document there are only three soil layers i.e. (1), (2) & (3). Please check and correct accordingly.	The details mentioned in Soil Investigation report has been considered in the calculation. Issue closed		Refer note 3. SEPCO to confirm the SBC as 800 KPa for all the four unit foundations with some proof document or geotechnical investigation report. Also refer general comment no. 2.	SEPCO submitted Geotechnical report for unit 4. Issue Closed.

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4		Refer note 5. (a) Either elaborate the extents of 1st, 2nd & 3rd stage castings in this drawing itself or otherwise mention the drg no in which relevant explanation has been provided. (b) Please confirm the grade of TMT as Fe500 if it is final then revise note 8 of column line (A) foundation drg no F4341S-T0301-01, Rev 0. for grade of steel where it was mentioned as Fe415. Also in note 5, IS:875 shall be replaced by IS:1786-2008. Please correct.	The comment incorporated. Issue Closed.		The comment incorporated. Issue Closed.	The comment incorporated. Issue Closed.
5		Refer Note 8. The Chinese code GB/T 50476-2008 is not available. Please provide the relevant clause from this code in support of environmental category of foundation. Also please provide English version of the code for verifying the same.	SEPCO agreed to provide English version of Chinese codes mentioned in various drawings by - 05/10 GKEL/LII noted.		Code not submitted. SEPCO to submit the same.	Soft copy of the English version of the codes have been submitted by SEPCO. Issue Closed.
6		Refer note 9. Provide relevant code names. Also please provide English version of the code for verifying the same. Alternatively Preventive Measures for mass concreting to be mentioned in notes.	Code names incorporated. SEPCO agreed to provide English version of Chinese codes mentioned in various drawings by - 05/10 GKEL/LII noted.		Codes not submitted. SEPCO to submit the same.	
7		Please also include specifications for the anti-termite treatment and anti-corrosive treatment for reinforced concrete.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
8		Note for effective dewatering of foundation pits has not been included similar to the note 8 of column line (A) foundation drg no F4341S-T0301-01, Rev 0. Please provide the same.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
9		Please provide reference document or drawing for excavation.	SEPCO agreed to provide separately as work instruction document. GKEL/LII noted		Noted.	Noted.
12		Procedure for installation of settlement observation points needs to be mentioned. Allowable settlement details shall be mentioned. Refer item-16.	SEPCO informed that site civil engineer will give the details in WI. GKEL noted		Noted.	Noted.
C	Foundation of column line (B) (C) (D) sht 1 37-F4341S-T0302-02 Rev 0	Approval Category: C	Approval Category: A	Foundation of column line (B) (C) (D) sht 1 37-F4341S-T0302-02 Rev B	Approval Category: C	Foundation of column line (B) (C) (D) sht 1 37-F4341S-T0302-02 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the pedestal, shear wall, beam & foundation sizes could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer following comments: 1) Refer general comment no. 2. 2) Depth of JD-2 and JD-3 footings increased. SEPCO to submit the revised design calculations. 3) Lift foundation size revised. SEPCO to submit the revised design calculations. 4) What is the purpose of revising foundation size on grid B-6? Also SEPCO to submit the design calculations for the same.	For all points, refer resolution 2 in general comments.
2		Refer the 'X' coordinate provided in the drg. This is not matching with the basic design stage drg 37-F4341C-T-02 Rev B. SEPCO to ensure the correctness of the coordinates. Also SEPCO is requested to check and revise basic design document/ drawing related to co-ordinates as per final plant layout and submit the same for record. This will help in reviewing future drawings / document of various buildings/ structures.	SEPCO confirmed that The 'X' coordinate at these grids are correct. GKEL/LII noted.		Noted. Issue closed.	Noted. Issue closed.
3		Refer detail "RESERVED BARS OF FOUNDATION BEAM". The purpose of these bars is not clear. If these bars are dowels for certain pedestals then as per note 7, the lap length should be minimum 58d i.e. 58x16=928mm while in the detail the projection of bars is only 600mm and even less for some bars. Please correct the detail accordingly.	The comment incorporated. Issue Closed.		The comment incorporated. Issue Closed.	The comment incorporated. Issue Closed.

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4		Please show the shear wall on grid D beyond grid 7 extending towards grid 8a as per drg no 37-F4341S-T0302-03 Rev 0	The comment incorporated. Issue Closed.		The comment incorporated. Issue Closed.	The comment incorporated. Issue Closed.
5		Location dimensions of Foundation-Beam-Bars (Reserved Steel bars of foundation Beam) in 'X' and 'Y' direction with respect to center line of column are to be provided for all Beam-bars. For example JC-1A in grid row 'C' - 'X'-direction dimension is given, 'Y' - direction dimension is not given	The comment incorporated. Issue Closed.		The distances of centre lines of wall supporting pedestals from that of main short columns have been revised. SEPCO to ensure the adequacy in design and arrangement.	SEPCO confirmed. Issue closed.
6		GENERAL ARRANGEMENT Foundation layout of Main Power Building is required	SEPCO informed that after incorporating unit 4, General Arrangement foundation Layout of Main Power Building will be submitted. GKEU/LII noted.		GENERAL ARRANGEMENT Foundation layout of Main Power Building is required	General arrangement drawings have arranged for verification. The drawings have been verified for grid dimensions. SEPCO ensured the correctness of the all the drawings as per latest GA drawings.
7					Refer JLQ-4 on grid D between grids 2/01 and 1/01. The bottom of both the pedestal foundations to which the shear wall is connected is at -5.00m whereas the bottom of shear wall foundation has been kept at -6.50 m as per drg T0302-12, Rev B. SEPCO to clarify the purpose of different level arrangement.	This is required as founding levels of foundations which have been designed based on geotechnical report.
D	Foundation of column line (B) (C) (D) sht 2 37-F4341S-T0302-03 Rev 0	Approval Category: C	Approval Category: A	Foundation of column line (B) (C) (D) sht 2 37-F4341S-T0302-03 Rev B	Approval Category: C	Foundation of column line (B) (C) (D) sht 2 37-F4341S-T0302-03 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the pedestal, shear wall, beam & foundation sizes could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer following comments: 1) Refer general comment no. 2. 2) Depth of JD-2 and JD-3 footings increased. SEPCO to submit the revised design calculations. 3) What is the purpose of revising foundation size on grid B-6? Also SEPCO to submit the design calculations for the same. 4) SEPCO to correct the bottom level elevation of JD-3 foundation on grid 15a-D from -6.000 to -6.900 as per drg no. T0302-10, Rev B.	For 1 to 3 points, refer resolution 2 in general comments. Comment 4 incorporated. Issue Closed.
2		Do not show the shear wall on grid D beyond grid 15b extending towards grid 16 as there is no shear wall at this location as per drg no 37-F4341S-T0302-04 Rev 0	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
E	Foundation of column line (B) (C) (D) sht 3 37-F4341S-T0302-04 Rev 0	Approval Category: C	Approval Category: A	Foundation of column line (B) (C) (D) sht 3 37-F4341S-T0302-04 Rev B	Approval Category: C	Foundation of column line (B) (C) (D) sht 3 37-F4341S-T0302-04 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the pedestal, shear wall, beam & foundation sizes could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer following comments: 1) Refer general comment no. 2. 2) Depth of JD-2 and JD-3 footings increased. SEPCO to submit the revised design calculations. 3) What is the purpose of revising foundation size on grid B-6? Also SEPCO to submit the design calculations for the same. 4) Foundation arrangement on grid 21 has been revised. SEPCO to submit the design calculations in support of the revisions made.	For all points, refer resolution 2 in general comments.
F	Anchor bolt locating detail @ column line (B) (C) (D) sht 1 37-F4341S-T0302-05 Rev 0	Approval Category: C	Approval Category: A	Anchor bolt locating detail @ column line (B) (C) (D) sht 1 37-F4341S-T0302-05 Rev B	Approval Category: C	Anchor bolt locating detail @ column line (B) (C) (D) sht 1 37-F4341S-T0302-05 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the anchor bolt sizes could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		SEPCO to note that there are many changes in the levels and bracing system in Main Power Building's latest superstructure drawings (Volume No. T0313). Consequently the support reactions are likely to be changed considerably. If so, SEPCO to submit the revised anchor bolt design calculations for the modified support reactions.	Refer resolution 2 in general comments.
2		The pedestal on grid C-3 are not braced from both directions. However the shear slot of model AB has been provided to this pedestal. Please check and correct if required.	SEPCO clarified that shear slot is not required as per analysis results. However for extra precaution the same have been considered in the drawing. GKEU/LII noted.		SEPCO to ensure that the arrangement is adequate for the revised design forces.	SEPCO confirmed. Issue closed.

G	Anchor bolt locating detail @ column line (B) (C) (D) sht 2 37-F4341S-T0302-06 Rev 0	Approval Category: C	Approval Category: A	Anchor bolt locating detail @ column line (B) (C) (D) sht 2 37-F4341S-T0302-06 Rev B	Approval Category: C	Anchor bolt locating detail @ column line (B) (C) (D) sht 2 37-F4341S-T0302-06 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the anchor bolt sizes could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		SEPCO to note that there are many changes in the levels and bracing system in Main Power Building's latest superstructure drawings (Volume No. T0313). Consequently the support reactions are likely to be changed considerably. If so, SEPCO to submit the revised anchor bolt design calculations for the modified support reactions.	SEPCO ensured the correctness and confirmed that the anchor bolt design satisfy the revised requirements. Issue closed.
2		The pedestals on grid B-8b & B-9 are not braced from both directions. However the shear slot of model AB has been provided to these pedestals. Please check and correct if required.	SEPCO clarified that shear slot is not required as per analysis results. However for extra precaution the same have been considered in the drawing. GKEL/ LII noted.		SEPCO to ensure that the arrangement is adequate for the revised design forces. Also Foundation arrangement on grid 21 has been revised. SEPCO to submit the design calculations in support of the revisions made.	Refer resolution 2 in general comments. EPCO ensured the arrangement is adequate for the revised design forces.
3					Mark size of anchor bolt on grid B-15b.	Comment incorporated issue closed.
H	Anchor bolt locating detail @ column line (B) (C) (D) sht 3 37-F4341S-T0302-07 Rev 0	Approval Category: C	Approval Category: A	Anchor bolt locating detail @ column line (B) (C) (D) sht 3 37-F4341S-T0302-07 Rev B	Approval Category: C	Anchor bolt locating detail @ column line (B) (C) (D) sht 3 37-F4341S-T0302-07 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the anchor bolt sizes could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		SEPCO to note that there are many changes in the levels and bracing system in Main Power Building's latest superstructure drawings (Volume No. T0313). Consequently the support reactions are likely to be changed considerably. If so, SEPCO to submit the revised anchor bolt design calculations for the modified support reactions.	Refer resolution 2 in general comments.
2		The pedestals on grid B-16, B-20 & B-21 are not braced from both directions. However the shear slot of model AB has been provided to these pedestals. Please check and correct if required.	SEPCO clarified that shear slot is not required as per analysis results. However for extra precaution the same have been considered in the drawing. GKEL/ LII noted.		SEPCO to ensure that the arrangement is adequate for the revised design forces.	SEPCO confirmed. Issue closed.
I	Detail Drawing of foundations JB-1~3 & LT-1 37-F4341S-T0302-08 Rev 0	Approval Category: C	Approval Category: A	Detail Drawing of foundations JB-1~3 & LT-1 37-F4341S-T0302-08 Rev B	Approval Category: C	etail Drawing of foundations JB-1~3 & LT-1 37-F4341S-T0302-08 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the pedestal & foundation sizes and their reinforcement could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer general comment 2.	Refer resolution 2 in general comments.
2		Refer elevation of footing JB-1. The size of short column should be 1200x1700 instead of 1100x1400.	The comment incorporated. Issue Closed.		It is not clear from note1 that C20 rubble concrete is to be filled below the foundation LT-1 upto the unexcavated soil/rock layer. SEPCO to specifically mention this in the note.	SNPDRI/SEPCO confirmed that C20 rubble concrete is to be filled below the foundation LT-1 upto the unexcavated soil/rock layer as per the drawing and same as the general specification note no. 3 of 37-F4341S-T0302-01.
J	Detail Drawing of foundations JC-1~3, JC-1A & LT-1 37-F4341S-T0302-09 Rev 0	Approval Category: C	Approval Category: A	Detail Drawing of foundations JC-1~3, JC-1A & LT-1 37-F4341S-T0302-09 Rev B	Approval Category: C	Detail Drawing of foundations JC-1~3, JC-1A & LT-1 37-F4341S-T0302-09 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the pedestal & foundation sizes and their reinforcement could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer general comment 2.	Refer resolution 2 in general comments.
2		Add note for providing top reinforcement in all isolated footings as per detail " SKETCH MAP OF FOUNDATION TEMPERATURE REBAR" in drg no 37-F4341S-T0302-08 Rev 0	The comment incorporated. Issue Closed.		It is not clear from note1 that C20 rubble concrete is to be filled below the foundation LT-2 upto the unexcavated soil/rock layer. SEPCO to specifically mention this in the note.	SNPDRI/SEPCO confirmed that C20 rubble concrete is to be filled below the foundation LT-2 upto the unexcavated soil/rock layer as per the drawing and same as the general specification note no. 3 of 37-F4341S-T0302-01.
K	Detail Drawing of foundations JD-1~3 & JD-1A 37-F4341S-T0302-10 Rev 0	Approval Category: C	Approval Category: A	Detail Drawing of foundations JD-1~3 & JD-1A 37-F4341S-T0302-10 Rev B	Approval Category: C	Detail Drawing of foundations JD-1~3 & JD-1A 37-F4341S-T0302-10 Rev B Approval Category: A

1		In the absence of analysis results and design calculations, The adequacy of the pedestal & foundation sizes and their reinforcement could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer general comment 2.	Refer resolution 2 in general comments.
2		Add note for providing top reinforcement in all isolated footings as per detail " SKETCH MAP OF FOUNDATION TEMPERATURE REBAR" in drg no 37-F4341S-T0302-08 Rev 0	The comment incorporated. Issue Closed.		Add note for providing top reinforcement in all isolated footings as per detail " SKETCH MAP OF FOUNDATION TEMPERATURE REBAR" in drg no 37-F4341S-T0302-08 Rev 0	Top reinforcement shall be followed as per details given in " SKETCH MAP OF FOUNDATION TEMPERATURE REBAR" in drg no 37-F4341S-T0302-08 Rev 0.
3		Provide top reinforcement in the footing in sec 2-2.	SEPCO ensured that the details with no top reinforcement satisfy the design requirement for small foundation which has low width and more depth as required. GKEL/LII noted.		Refer sec 2-2. Detail of bottom reinforcement of footing is not mentioned. Also a minimum 300 mm 90 degrees bend at the bottom of main vertical reinforcement is not shown. SEPCO to make these corrections.	Details satisfy the design requirements. Issue Closed.
4		In sec 3-3 the bent portion of the main vertical bars of pedestals at bottom resting on the footing's bottom reinforcement must be at least 300 mm as per IS code SP34 instead of 200 mm.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
5		Refer detail JD-2. As per drg no 37-F4341S-T0302-02, 03 & 04 Rev 0 this foundation is supporting a pedestal of size 1300x1800 instead of 1400x1800. Please check and correct.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
6		Remove "JD-1A" from the title of this drawing because there is no foundation with this name in this volume.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
L	Detail Drawing of foundation's short column 37-F4341S-T0302-11 Rev 0	Approval Category: C	Approval Category: A	Detail Drawing of foundation's short column 37-F4341S-T0302-11 Rev B	Approval Category: C	Detail Drawing of foundation's short column 37-F4341S-T0302-11 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the pedestal sizes and their reinforcement could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer general comment 2.	Refer resolution 2 in general comments.
2		As per Indian code SP34, section 6, maximum spacing of ties within the footing must be 300mm subject to a minimum of 3 ties. SEPCO is requested to modify all pedestal details as per Indian code or provide corresponding Chinese code for justification.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
3		It seems that there will be a lot of congestion of reinforcement and the anchor bolt rack within the pedestal near -0.55 m level. SEPCO to confirm the practical feasibility of this arrangement. SEPCO to ensure that care shall be taken during construction to avoid cutting of main reinforcement bars of pedestals to accommodate the anchor bolt fixing frame.	SEPCO ensured that proper care shall be taken at site. Reinforcement spacing will not be reduced. Rather SEPCO shall arrange proper vibrating needle for concreting GKEL/LII noted..		Noted.	Noted.
4		Please relate all pedestal sections with their corresponding elevation using section numbers.	SEPCO clarified the details shown for pedestals and their sections which are understandable. GKEL/ LII noted.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
5		In all pedestal details, in the elevation the total number of 32 dia vertical bars is 14 while in their corresponding sections the total number of the same bars is shown 8+8= 16. Please check and correct.	The comment incorporated. Issue Closed.		Refer "SHORT COLUMN 1100X1800". The foundation thickness and bottom of foundation shall be corrected from 3700 mm to 4100 mm and -6.500 to -6.900 respectively because no foundation is resting on -6.500 m lvl in the plan drawings.	Comment incorporated. Issue Closed.
6		The note mentioned below all pedestal elevations i.e. "VALUES IN () INDICATED THE DIMENSION AND SIZE OF JLQ-1 OR JLQ-2 IN THE ROW (D) AXIS" is not understood as there is no JLQ-1 and JLQ-2 on grid D. Please correct.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
M	Sketch-map of anchor bolts detail. The shear slot and shear wall JLQ-*. Short column casting by steps 37-F4341S-T0302-12 Rev 0	Approval Category: C	Approval Category: A	Sketch-map of anchor bolts detail. The shear slot and shear wall JLQ-*. Short column casting by steps 37-F4341S-T0302-12 Rev B	Approval Category: C	Sketch-map of anchor bolts detail. The shear slot and shear wall JLQ-*. Short column casting by steps 37-F4341S-T0302-12 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the anchor bolts, shear wall sizes and reinforcement could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer general comment 2.	Refer resolution 2 in general comments.

2		Refer "JLQ-1. JLQ-2. JLQ-3 (JLQ-4. JLQ-5)". a) The note "VALUES IN () BRACKETS INDICATED THE DIMENSION AND SIZE OF JLQ-1 OR JLQ-2 IN THE ROW (D) AXIS" is not understood as there is no JLQ-1 and JLQ-2 on grid D. Please elaborate and correct if required. b) The section indicates that the bottom of footing of JLQ-4 is at EL-6.000, while in drg no 37-F4341S-T0302-02 Rev 0 bottom of the pedestal foundations it connects to (i.e. JD-1), is at EL-5.000. SEPCO to clarify the requirement of keeping the shear wall foundation even deeper than pedestal foundations. c) Also in drg no 37-F4341S-T0302-03, Rev 0, JLQ-4 is connecting to the footings at different levels i.e. at EL-5.000 & -6.000. Hence it is advisable to keep the shear wall foundation at EL-5.000, so that the longitudinal bars of the shear wall footing can be embedded into the pedestal footing at both ends.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
3		Refer "JLQ-1. JLQ-2. JLQ-3 (JLQ-4. JLQ-5)", "JLQ-1A" & "JLQ-3A". The bent portion of the main vertical bars of pedestals at bottom resting on the footing's bottom reinforcement must be at least 300 mm as per IS code SP34 instead of 100 mm.	The comment incorporated. Issue Closed.		Comment incorporated. Issue Closed.	Comment incorporated. Issue Closed.
4		Refer section 1-1. Mention the size of insert plate M2020C2.	Details are provided in the drawing volume T0104. Issue closed		Noted. Issue closed.	Noted. Issue closed.
N	Detail Drawing of anchor bolt rack 37-F4341S-T0302-13 Rev 0	Approval Category: C	Approval Category: A	Detail Drawing of anchor bolt rack 37-F4341S-T0302-13 Rev B	Approval Category: C	Detail Drawing of anchor bolt rack 37-F4341S-T0302-13 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the anchor bolts could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer comment no. 1 on drg. no. T0302-05, Rev B	
O	Detail Drawing of LT-3 37-F4341S-T0302-14 Rev 0	Approval Category: C	Approval Category: A	Detail Drawing of LT-3 37-F4341S-T0302-14 Rev B	Approval Category: C	Detail Drawing of LT-3 37-F4341S-T0302-14 Rev B Approval Category: A
1		In the absence of analysis results and design calculations, The adequacy of the footing size and reinforcement could not be reviewed.	SEPCO produced design calculations. Details are found in conformity with the design calculation. Issue Closed.		Refer comment no. 1 on drg. no. T0302-02, Rev B.	Refer resolution 2 in general comments.
2		Refer "THE PLAN OF LT-3". Please elaborate the purpose of the 2-12@150, 600mm L shaped bars. If these bars are dowels for lift pit wall, provide bars on each sides with full development length for each instead of providing single L-shaped bar. Please also include dowels bar provision from LT-3 foundation for vertical reinforcement of lift pit walls.	The comment incorporated. Issue Closed.		Refer "THE PLAN OF LT-3". SEPCO to indicate the dowels bars from LT-3 foundation for vertical reinforcement of lift pit walls.	Dowel reinforcement for lift well vertical wall is not required as the wall started from lift well raft foundation which is rested at level -2.00M.
P				Foundation of column line (B) (C) (D) sht 4 37-F4341S-T0302-15 Rev 0	Approval Category: C	Foundation of column line (B) (C) (D) sht 4 37-F4341S-T0302-15 Rev 0 Approval Category: A
1					Refer general comment 2.	Refer resolution 2 in general comments.
2					Refer shear wall shown on grid 21 below grid B. As per Drg no. T0309(1)-04, Rev A there is no shear wall existing at this location. Please check and correct suitably.	Drg T0309(1)-04 has been revised for the comment . Issue Closed.
Q				Anchor bolt locating detail @ column line (B) (C) (D) sht 4 37-F4341S-T0302-16 Rev 0	Approval Category: C	Anchor bolt locating detail @ column line (B) (C) (D) sht 4 37-F4341S-T0302-16 Rev 0 Approval Category: A
1					Submit anchor bolt design for 4th unit.	Refer resolution 2 in general comments.

Wheek Kumar
16/9/10
CHIVIK KUMAR
A L E I

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SNPDRI
16/9/10