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~~C O N F I D E N T I A L COMINT CHANNELS FINAL SECTION OF 2~~

CITE: SM-012-84

13. HENCE WE WOULD LIKE YOU TO FORWARD TO OUR  
CONCERNS, AS ABOVE, AND OUR REQUEST FOR THE FOLLOWING:

- A) A STUDY AT THE DETAILED TECHNICAL LEVEL OF THE ELECTRICAL FUNCTIONING OF THE MANUAL VOLTAGE ADJUSTMENT CIRCUITRY AND THE EFFECT ON IT OF INSERTING BELLING LEE 6 AMP FILTERS.
- B) A STUDY AT THE DETAILED TECHNICAL LEVEL OF THE OPERATION OF THE 400HZ VOLTAGE FEEDBACK LOOP.
- C) IN VIEW OF OUR CYBER EXPERIENCE, THE MANUAL VOLTAGE ADJUSTMENT RHEOSTAT FILTERING PROBLEM MAY DISAPPEAR SIMPLY BY SWAPPING MAKE OF MG SET. WE THEREFORE REQUEST THAT THE STUDIES OF 13(A) AND 13(B) ABOVE BE DONE FOR BOTH G.E. AND KATO MACHINES.
- D) IT WOULD GREATLY ASSIST OUR ABILITY TO TRACK THE STUDY AND ITS RESULTS IF CONTROL CIRCUIT SCHEMATICS AND DESCRIPTION OF CIRCUIT OPERATION FOR BOTH MANUAL VOLTS ADJUSTMENT AND FEEDBACK LOOP CONTROL COULD BE SUPPLIED FOR BOTH MAKES OF MACHINE.

14. THE SITE INSTALLATION MANUAL LAYS DOWN PERMISSABLE VOLTAGE DROPS AT MAXIMUM CURRENT BUT DOES NOT SPECIFY IN TERMS OF VOLTAGE REGULATION. THE ADDITION OF OUR ISOLATING TRANSFORMER, WHILE PERMITTING COMPENSATION OF FIXED VOLTAGE DROPS BY USE OF TAPPINGS, WILL DEGRADE THE VOLTAGE REGULATION OF THE SUPPLY CIRCUITS DUE TO ITS OWN INTERNAL IMPEDANCE. IF THE CURRENT IN THE LOAD (I.E. THE COMPUTER) IS VIRTUALLY CONSTANT AT ANY FIXED VALUE OF SUPPLY VOLTAGE THE DEGRADED SUPPLY LINE REGULATION WILL NOT MATTER SINCE ALL VOLTAGE DROPS WILL BE FIXED AND THEREFORE COMPENSATABLE. IS THIS THE CASE QUERY.

15. IF SO, ONE WAY OF AVOIDING THE FILTERING OF THE 400HZ VOLTAGE  
FEEDBACK LINES IS TO SAMPLE THE 400HZ OUTSIDE THE SCREENED AREA AT  
THE POWER INPUT TERMINALS OF THE SUPPLY LINE FILTERS. THE POWER  
RUM BETWEEN THERE AND THE PDU-1 (INCLUDING THE FILTER VOLTAGE DROP)  
IS NOW OUTSIDE THE FEEDBACK LOOP BUT WILL HAVE A FIXED VOLTAGE DROP  
WHICH IS COMPENSATABLE. REQUEST YOU ALSO PASS THIS QUERY TO

16. IT WOULD BE APPRECIATED IF                      COULD GATHER TOGETHER AS  
MUCH OF THE REQUESTED INFORMATION AS POSSIBLE BEFORE YOUR NEXT  
VISIT HERE.

C. PROPOSED VISIT

17. UNDERSTAND FROM                      YOU ARE CONSIDERING A VISIT TO  
AUSTRALIA AGAIN SOME TIME AFTER 18 JUNE. OUR PREFERENCE IS  
21 JUNE ONWARDS. HOWEVER, AS MENTIONED ABOVE, REQUEST YOU COME  
PREPARED FOR FURTHER TECHNICAL DISCUSSIONS ON POWER RELATED ISSUES.  
NOTE ALSO THAT OUR BUILDING OPS PEOPLE (                      ETC) NOT AVAILABLE  
ON 25 JUNE.

D. OTHER MATTERS

18. SIGNAL RECEIVED TODAY (12 JUNE) FROM                      ADVISES RECEIPT  
OF LETTER ON PROPOSED METHOD OF OPERATION IN AUSTRALIA. I THEREFORE  
EXPECT TO RECEIVE IT ON 20 JUNE.

19. REF 8 PARA 6 REFERS TO LETTER TO                      , PRESUME YOU  
INTENDED                      , DSD'S ASSISTANT DIRECTOR SUPPORT SERVICES.

REGARDS.

#8314  
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