SUBJECT: ELECTRICAL SYSTEMS			RESPONSE BY OPERATOR							
	QUESTIONS	REF TO ANO-14-I	YES		NO	N. A	REMARKS (Include reference to documentation or reason for non-			
			S	NS			compliance / non- applicability)			
EL	ELECTRICAL POWER SUPPLY SYSTEMS FOR AIR NAVIGATION SERVICES									
1.	Is adequate primary power supply available at aerodromes for the safe functioning of air navigation facilities?	8.1.1								
2.	Are the design and provision of electrical power systems for aerodrome visual and radio navigation aids such that an equipment failure will not leave the pilot with inadequate visual and non-visual guidance or misleading information? Note – The design and installation of the electrical systems need to take into consideration factors that can lead to malfunction, such as electromagnetic disturbances, line losses, power quality, etc. Additional guidance is given in the Aerodrome Design Manual, Part 5.	8.1.2								
3.	Are the electric power supply connections to those facilities for which secondary power is required so arranged that the facilities are automatically connected to the secondary power supply on failure of the primary source of power?	8.1.3								
4.	Is the time interval between failure of the primary source of power and the complete restoration of the services required by paragraph 8.1.10 of the ANO-14-I as short as practicable, except that for visual aids associated with non-precision, precision approach or take-off runways the requirements of Table 8-1 of the ANO-14-I for maximum switch-over times should apply? Note — A definition of switch-over time is given in Chapter 1 of the ANO-14-I.	8.1.4								
5.	For a secondary power supply installed after 4 November 1999, are the electric power supply connections to those facilities for which secondary power is required be so arranged that the facilities are capable of meeting the requirements of Table 8-1 of the ANO-14-I for maximum switch-over times as defined in Chapter 1 of the ANO-14-I?	8.1.5								
6.	For a precision approach runway, is a secondary power supply capable of meeting the requirements of Table 8-1 of the ANO-14-I for the appropriate category of precision approach runway provided?									
	A. Are the electric power supply connections to those facilities for which secondary power is required so arranged that the facilities are automatically connected to the secondary power supply on failure of the primary source of power?	8.1.6								
7.	For a runway meant for take-off in runway visual range conditions less than a value of 800 m, is a secondary power supply capable of meeting the relevant	8.1.7								

	SUBJECT: ELECTRICAL SYSTEMS			RESPONSE BY OPERATOR					
	QUESTIONS	REF TO ANO-14-I	YES		NO	N. A	REMARKS (Include reference to documentation		
			S	NS			or reason for non- compliance / non- applicability)		
	requirements of Table 8-1 of the ANO-14-I provided?								
8.	At an aerodrome where the primary runway is a non-precision approach runway, is a secondary power supply capable of meeting the requirements of Table 8-1 of the ANO-14-I provided except that a secondary power supply for visual aids need not be provided for more than one non-precision approach runway?	8.1.8							
9.	At an aerodrome where the primary runway is a non-instrument runway, is a secondary power supply capable of meeting the requirements of paragraph 8.1.4 of the ANO-14-I provided, except that a secondary power supply for visual aids need not be provided when an emergency lighting system in accordance with the specification of paragraph 5.3.2 of the ANO-14-I is provided and capable of being deployed in 15 minutes?	8.1.9							
10.	Are the following aerodrome facilities provided with secondary power supply capable of supplying power when there is a failure of primary power supply: a) the signalling lamp and the minimum lighting necessary to enable air traffic services personnel to carry out their duties; Note — The requirement for minimum lighting may be met by other than electrical means.								
	b) all obstacle lights which, in the opinion of the <i>aerodrome operator</i> , are essential to ensure the safe operation of aircraft;	8.1.10							
	c) approach, runway and taxiway lighting as specified in paragraphs 8.1.6 to 8.1.9 of the ANO-14-I;								
	d) meteorological equipment;								
	e) essential security lighting, if provided in accordance with paragraph 9.11 of the ANO-14-I;								
	f) essential equipment and facilities for the aerodrome responding emergency agencies; and								
	g) floodlighting on a designated isolated aircraft parking position if provided in accordance with paragraph 5.3.24.1 of this Manual and								
	h) illumination of apron areas over which passengers may walk? Note — Specifications for secondary power supply for radio navigation aids and ground elements of communications systems are given in ICAO Annex 10, Volume I, Part I, Chapter 2.								
11.	Are requirements for a secondary power supply met by either of the following: — independent public power, which is a source of power supplying the aerodrome service from a	8.1.11							

	SUBJECT: ELECTRICAL SYSTEMS		RESPONSE BY OPERATOR					
	QUESTIONS	REF TO ANO-14-I	S	ES NS	NO	N. A	REMARKS (Include reference to documentation or reason for non-compliance / non-	
	substation other than the normal substation through a transmission line following a route different from the normal power supply route and such that the possibility of a simultaneous failure of the normal and independent public power supplies is extremely remote; or						applicability)	
	 standby power unit(s), which are engine generators, batteries, etc., from which electric power can be obtained? Note — Guidance on secondary power supply is given in the ICAO Aerodrome Design Manual, Part 5. 							
12.	For a runway meant for use in runway visual range conditions less than a value of 550 m, are the electrical systems for the power supply, lighting and control of the lighting systems included in Table 8-1 of the ANO-14-I so designed that an equipment failure will not leave the pilot with inadequate visual guidance or misleading information? Note — Guidance on means of providing this protection	8.2.1						
13.	is given in the ICAO Aerodrome Design Manual, Part 5 — Electrical Systems. Where the secondary power supply of an aerodrome is provided by the use of duplicate feeders, are such supplies physically and electrically separate so as to ensure the required level of availability and independence?	8.2.2						
14.	Where a runway forming part of a standard taxi-route is provided with runway lighting and taxiway lighting, are the lighting systems interlocked to preclude the possibility of simultaneous operation of both forms of lighting?	8.2.3						
15.	Is a system of monitoring employed to indicate the operational status of the lighting systems?	8.3.1						
16.	Where lighting systems are used for aircraft control purposes, are such systems monitored automatically so as to provide an indication of any fault which may affect the control functions?	8.3.2						
	A. Is this information automatically relayed to the air traffic services unit?							
17.	Where a change in the operational status of lights has occurred, is an indication provided within two seconds for a stop bar at a runway-holding position and within five seconds for all other types of visual aids?	8.3.3						
18.	For a runway meant for use in runway visual range conditions less than a value of 550 m, are the lighting systems detailed in Table 12-1 of the ANO-14-I monitored automatically so as to provide an indication when the serviceability level of any element falls below the minimum serviceability level specified in paragraphs	8.3.4						

SUBJECT: ELECTRICAL SYSTEMS			RESPONSE BY OPERATOR				
QUESTIONS	REF TO ANO-14-I	YES		NO	N. A	REMARKS (Include reference to documentation or reason for non-	
		S	NS			or reason for non- compliance / non- applicability)	
10.5.7 to 10.5.11 of the ANO-14-I, as appropriate?							
A. Is this information automatically relayed to the maintenance crew?							
19. For a runway meant for use in runway visual range conditions less than a value of 550 m, are the lighting systems detailed in Table 8-1 of the ANO-14-I monitored automatically to provide an indication when the serviceability level of any element falls below the minimum level <i>specified in 10.5.7 & 10.5.8</i> below which operations should not continue?	8.3.5						
 A. Is this information automatically relayed to the air traffic services unit and displayed in a prominent position? Note — Guidance on air traffic control interface and visual aids monitoring is included in the ICAO Aerodrome Design Manual, Part 5 — Electrical Systems. 							
Comments of Inspector (s): Conclusions:							
						•••••	
Signature of Aerodrome Safety Inspector (AGA), Member	Signature of Aerodrome Safety Inspector (AGA), Member				Signature of Aerodrome Safety Inspector (AGA), Member		
Sign	nature of Aerodroms	e Safety Ii	nspector (AGA),	_		

In accordance with ANO-14-I