Examination of Estimates of Expenditure 2013-14

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Reply Serial No.

ENB060

Question Serial No.

5035

Head:	42 Electrical a Department	and Me	chanical Services	Subhead (No. & title):
Program	<u>nme</u> :	(1)	Energy Supply; Electr	ical, Gas and Nuclear Safety
Control	ling Officer:	Direc	tor of Electrical and Me	chanical Services
Director	of Bureau:	Secre	tary for the Environmen	t

Question:

With regard to Registered Electrical Worker (REW), please provide the following information:

- (a) the number of REWs, their age profile and the number of years holding the registration listed out in table format in accordance with the grades of registration;
- (b) details of the Continuing Professional Development (CPD) scheme for REW; and since its implementation, the number of applications received, the number of REWs completed training, and the related expenditure; whether the Administration has assessed the effectiveness of the scheme, if yes, what is the result?; if no, why?

Asked by: Hon. TANG Ka-piu

Reply:

(a) In accordance with the Electricity (Registration) Regulations (Cap. 406D), Registered Electrical Workers (REWs) are classified in the following grades:

Classifications	Relevant electrical work			
Grade A	Low voltage fixed electrical installation that has a maximum demand not exceeding 400 A, single or three phase.			
Grade B	Low voltage fixed electrical installation that has a maximum demand not exceeding 2500 A, single or three phase.			
Grade C	Low voltage fixed electrical installation of any capacity.			
Grade H	High voltage fixed electrical installation.			
Grade R	Specific types of electrical installations including neon sign, air- conditioning installation, generating facility installation, etc.			

As at 15 March 2013, there are a total of 74 753 REWs in Hong Kong. Their age profile and number of years holding the registration are summarised in the following tables.

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(i) Age profile:

Grade	Age range					Total
	≤ 30	31-40	41 – 50	51 - 60	> 60	(Note 1)
А	2 354	15 480	18 699	20 082	6 690	63 305
В	310	3 357	3 858	3 649	1 433	12 607
С	19	360	523	365	246	1 513
Н	67	859	1 196	1 054	375	3 551
R	294	1 521	1 775	1 551	536	5 677

(ii) Number of years holding the registration:

Grade	Number of years holding registration				Total
	\leq 5 years	6 – 10 years	11 – 15 years	> 15 years	(Note 1)
А	8 384	16 223	8 108	30 590	63 305
В	2 146	3 242	2 843	4 376	12 607
С	277	357	330	549	1 513
Н	769	799	660	1 323	3 551
R	416	609	1 098	3 554	5 677

(Note 1: Since a REW can hold more than one grade of registrations at the same time, the sum of REWs of different grades is not equal to the total number of REWs.)

(b) The CPD scheme for REW has been implemented since January 2012. Under the scheme, REWs need to complete training covering two modules namely, "Legislative and safety requirements" and "Technical Knowledge" before applying for registration renewal once every three years.

REWs can complete the CPD training by attending technical talks organised by Electrical and Mechanical Services Department or other recognised trade organisations and academic institutions, or by completing a short exercise at our training centre.

By end February 2013, 29 732 REWs successfully completed their CPD training. Existing manpower and resources are deployed for the implementation of the CPD scheme. As the officers involved also handle other duties at the same time, there is no separate breakdown on the expenditure involved in the implementation of the CPD scheme.

We conducted two surveys on the effectiveness of the CPD scheme with 1 030 REWs who completed the CPD training. More than 84% of these REWs considered that the CPD scheme could help enhance their professional knowledge and promote life-long learning culture in the trade.

Name in block letters: CHAN Fan

Director of Electrical andPost Title:Mechanical Services

Date: 2.4.2013

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Supplementary Information to SFC Q5035

- 1. Registered Electrical Workers (REW)
 - (a) Trend of registration In the past 5 years, the number of REWs increased by about 1000 per year reaching about a total of 75,000 now.
 - (b) Requirements for Registration:

Grade	Academic Qualification		Electrical Work Experience		
A	(i)	Craft Certificate in Electrical Engineering + Completion of Apprenticeship Training as Electrician	1 year practical experience in Grade A electrical worker after completion of apprenticeship training		
	(ii)	Certificate in Electrical Engineering, Passing the Trade Test, or completion of a Electrician Upgrading (Safety) Course organized by VTC	Employed as electrical worker for 5 years including 1 year of practical experience in Grade A electrical work		
В	(i)	Higher Certificate in Electrical Engineering + Completion of Apprenticeship Training as Electrician	2 years practical experience in Grade B electrical worker after completion of apprenticeship training		
	(ii)	Diploma in Electrical Engineering	Employed as electrical worker for 5 years including 2 years of practical experience in Grade B electrical work		
	(iii)	Certificate in Electrical Engineering	Holding a Grade A license for 5 years and have at least 3 years of practical experience in Grade B electrical work		
	(iv)	Passing the Grade B REW Examination organized by Hong Kong Examination and Assessment Authority	Holding a Grade A license for 5 years and have at least 5 years of practical experience in Grade B electrical work		
С			electrical work after completion of Scheme A		
	(ii)	Bachelor degree in electrical engineering	6 years of experience in electrical engineering and 1 year of practical experience in Grade C electrical work		
	(iii)	Passing the Grade C REW Examination organized by EMSD, HKIE, HKU and HKPU	Holding a Grade B license for 6 years and have at least 6 years of practical experience in Grade C electrical work		
Н	Holding a Grade B or Grade C license		 (i) completed a recognized training on HV engineering; or (ii) 1 year of practical experience in Grade H electrical work 		
R	Com	pleted a recognized special training	4 years of experience in the related type of electrical work		

(c) Grade R Registration

Current we have a total of 6 types of Grade R registration, namely:

- NS Neon sign 霓虹招牌
- AC Air-conditioning 空調裝置
- GF Generating facilities 發電設施
- WH Unvented thermal storage type electric water heater 無排氣管貯水式電熱水爐
- CD Connection / disconnection of electricity supply to / from low voltage electrical equipment 低壓電力器具接駁/截斷電源的電力工作
- OT other electrical work specified by EMSD 其他訂明類別的電力工程 (to be obsolete by natural wastage)
- 2. Continuing Professional Development for REW
 - (a) There are a total of 13 organizations (including trade associations, workers union, education institutes, professional institutes, and utility companies) recognized by EMSD to conduct CPD trainings.
 - (b) 298 representatives from the above 13 organizations have been appointed as "Recognized Trainer" to conduct the CPD training for REW.
 - (c) Progress of CPD training by end February 2013
 - (i) A total of 29 732 REWs completed CPD training.

	By EMSD	By Trade Organizations	Total
No. of Training Sessions	56	245	301

(ii) 301 sessions of CPD training were organized with breakdown as follows:

(All technical talks organized by EMSD are free-of-charge. Trade organizations are allowed to determine the course fees / free-of-charge at their own discretion.)

(iii) Overall progress of CPD training
 As of February 2013, the number of REWs who completed the CPD training (29 732)
 were far higher than the number of REWs (14 266) who were required to complete
 the CPD training for registration renewal at that time.