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1  /*!
2  * @file      Ctrl_Prog.c
3  * @brief     This file contains all the functions for the Programme Control
4  * @version   V1.0
5  * @date      2023-11-05
6  */
7  #include "Ctrl_Prog.h"
8  extern Flag_Check      Flag;
9  extern uint16_t Point_SW_ACDC;
10 uint32_t Sum_Bat = 0;
11 uint32_t Sum_PV = 0;
12 uint16_t AriM_Bat = 0;
13 uint16_t AriM_PV = 0;
14 uint8_t Ctrl_Program(void){
15     for(uint16_t j=0; j<=100; j++){
16         Sum_Bat += Re_Adc_BAT;
17         Sum_PV += Re_Adc_PV;
18     }
19     AriM_Bat = Sum_Bat/100;
20     AriM_PV = Sum_PV/100;
21     Sum_Bat = 0;
22     Sum_PV = 0;
23     if(AriM_PV >= Point_En_PV){    // PV > ~10V
24         TMR_Disable(TMR14);
25         return 0;
26     }
27     else if(AriM_Bat >= AC_SW_Volt && Flag.Cov_ACDC == 0){    // using battery power
28         Flag.Cov_ACDC = Flag_OFF;
29         return 1;
30     }
31     else{
32         Flag.Cov_ACDC = Flag_ON;
33         if(Re_Adc_DC > Point_SW_ACDC){    // using DC Power
34             return 2;
35         }
36         else if(AriM_Bat >= Dis_BAT){    // using battery low power
37             return 1;
38         }
39     }
40     return 3;    // Disable battery
41 }
42 void StartUp_LED(void){
43     for(uint8_t i = 0; i<5; i++){
44         LED_ALL_OFF;
45         Delay_ms(60);
46         LED_ALL_ON;
47         Delay_ms(60);
48     }
49     LED_ALL_OFF;
50 }

```