



**Monitoring report form for CDM project activity  
(Version 06.0)**

*Complete this form in accordance with the instructions attached at the end of this form.*

**MONITORING REPORT**

<b>Title of the project activity</b>	Sihwa Tidal Power Plant CDM Project	
<b>UNFCCC reference number of the project activity</b>	0349	
<b>Version number of the PDD applicable to this monitoring report</b>	Version 05.2	
<b>Version number of this monitoring report</b>	Version 01.0	
<b>Completion date of this monitoring report</b>	03/12/2018	
<b>Monitoring period number</b>	13 <sup>th</sup> monitoring	
<b>Duration of this monitoring period</b>	01/01/2018~30/06/2018	
<b>Monitoring report number for this monitoring report</b>	Not Applicable	
<b>Project participants</b>	Korea Water Resources Corporation(K-water)	
<b>Host Party</b>	Republic of Korea	
<b>Sectoral scopes</b>	Sectoral scope : 1 - Energy industries (renewable / non-renewable sources)	
<b>Applied methodologies and standardized baselines</b>	ACM0002 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources(version 4)	
<b>Amount of GHG emission reductions or net anthropogenic GHG removals achieved by the project activity in this monitoring period</b>	<b>Amount achieved before 1 January 2013</b>	<b>Amount achieved from 1 January 2013</b>
	-	147,769
<b>Amount of GHG emission reductions or net anthropogenic GHG removals estimated ex ante for this monitoring period in the PDD</b>	156,423 tCO <sub>2</sub> * This amount was recalculated by multiplying the day of this monitoring period over a year to the yearly estimated emission reductions in PDD, 315,440 tCO <sub>2</sub> . (315,440 tCO <sub>2</sub> / 365 days × 181 days = 156,423 tCO <sub>2</sub> )	

## SECTION A. Description of project activity

### A.1. General description of project activity

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- **Purpose of the project activity and the measures taken for GHG emission reductions**

This project activity is to generate electricity and supply it to the grid by using tidal power of Sihwa lake in Ansan city in Korea instead of the fossil fuel and contribute to mitigation of climate change & sustainable development. And the project supports the government policy which promotes development of renewable energy technology in the Republic of Korea and also contributes to decrease the dependence on the electricity generated by fossil fuel-fired power plants.

K-water's tidal power plant generates electricity utilizing the difference of ebb and flow of tide which emits zero greenhouse gas (hereinafter GHG) into the air, and the increase of sea/inner water circulation by this activity will improve the water quality that has been decreased during Sihwa lake's salt-to-fresh water process.

- **Total GHG emission reductions achieved in this monitoring period : 147,769 tCO<sub>2</sub>**

- **Brief description of the installed equipment :**

This project consists in 10 units of 25.4MW turbines and generates electricity of 552.7GWh per year from the tidal power plant. The specification of the installed equipment is as the following;

Table 1. Technical Specifications of the tidal power plant

Item	The Tidal Power Plant in Sihwa
Rated Output	25,400kW × 10 (Generator)
Bulb Diameter	8.2m
Runner Diameter	7.5m
Rated Head Drop	5.82 m (Max. 7.5m, Min. 1.0m) * Spring range - 7.804m, Mean range – 5.570m Neap range -3.336m
Rated Voltage	10,200V
Velocity	64.29rpm
Rotation Direction	Clockwise rotation looking at the sea

### A.2. Location of project activity

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- Host Party(ies) : Republic of Korea
- Region/State/ Province, etc : Gyeonggi-do
- City/Town/Community, etc : Daebudong-dong, Danwon-gu, Ansan city
- Physical/Geographical location : K-water Sihwa Tidal Power Plant  
(latitude of 37°18'46"N and longitude of 126°36'36"E)



### A.3. Parties and project participants

Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
Republic of Korea(host)	Public entity : Korea Water Resources Corporation (K-water)	No
Switzerland		

### A.4. Reference to applied methodologies and standardized baselines

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- The applied methodology : ACM0002 – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” (version 4)

\* Please refer to the below link for the further information of the methodology:

<http://cdm.unfccc.int/methodologies/DB/8W400U6E7LFHHYH2C4JR1RJWWO4PVN>

### A.5. Crediting period type and duration

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- Type of the crediting period : Renewable
- Duration corresponding to this monitoring period : 01/07/2011 ~ 30/06/2018

## SECTION B. Implementation of project activity

### B.1. Description of implemented project activity

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- Technology/Measure of the project activity**

Sihwa tidal power plants utilize the sea water when it is coming into Sihwa Lake which is an artificial lake made by the tide embankment, which generates electricity without emitting any GHG. The total installed capacity is 254MW.

• **Relevant dates for the project activity :**

- Construction period : 31/12/2004 – 14/11/2011
- Starting date of operation : 13/04/2011  
(\*commissioning period : 28/03/2011 – 29/02/2012)
- Starting date of commercial operation : 01/03/2012
- Continued operation : 13/04/2011 – Present

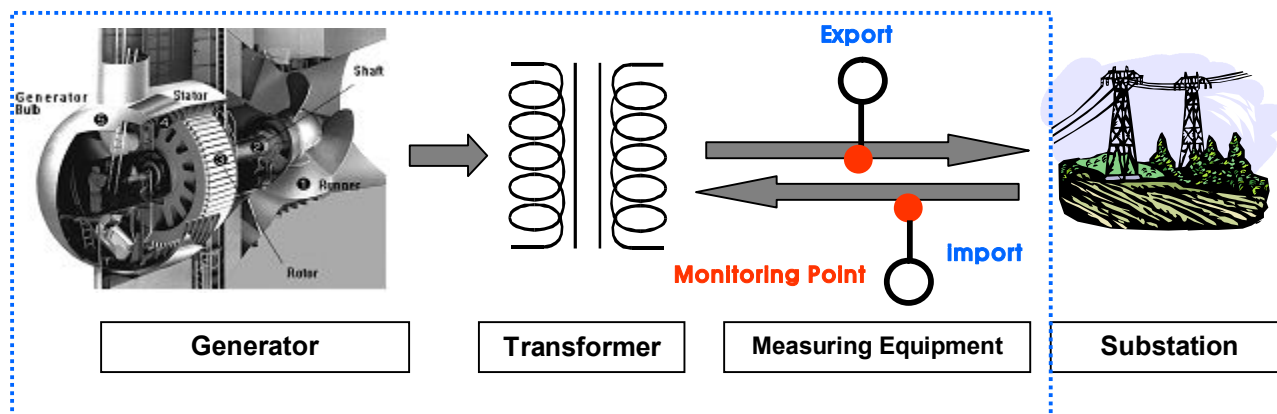
The project was under normal and continued operation status until now and the 13<sup>th</sup> monitoring period of the project is 01/01/2018 – 30/06/2018.

Refer to the diagrams and table below.

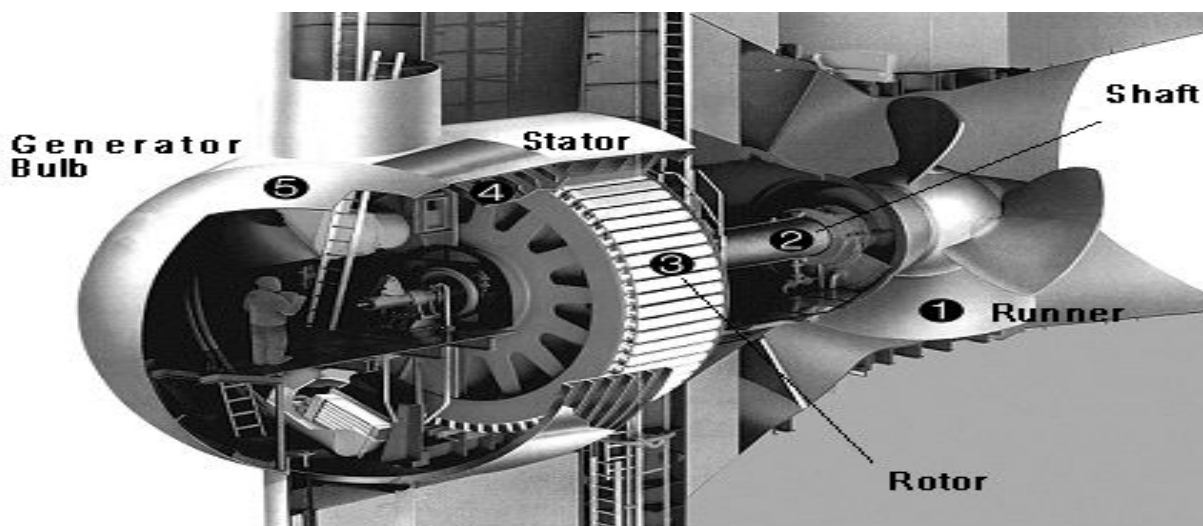
• **Operational events of the tidal power plant**

No special events occurred during this monitoring period. However one day the generator #1~#4, #9~#10 did not work, due to very little head drop of ebb tide. The other generator worked a little, so total exported electricity were not zero on the date. The operational events of sihwa tidal plant are as below. Refer to the ER calculation spreadsheets for the further information.

Date	Operation events	note
2018.04.10	Due to very little head drop of ebb tide, generator #1~#4, #9,#10 did not work(The data of the meter #1, #3 were zero). The other generator worked a little, so total exported electricity were not zero on each date.	



Project Boundary



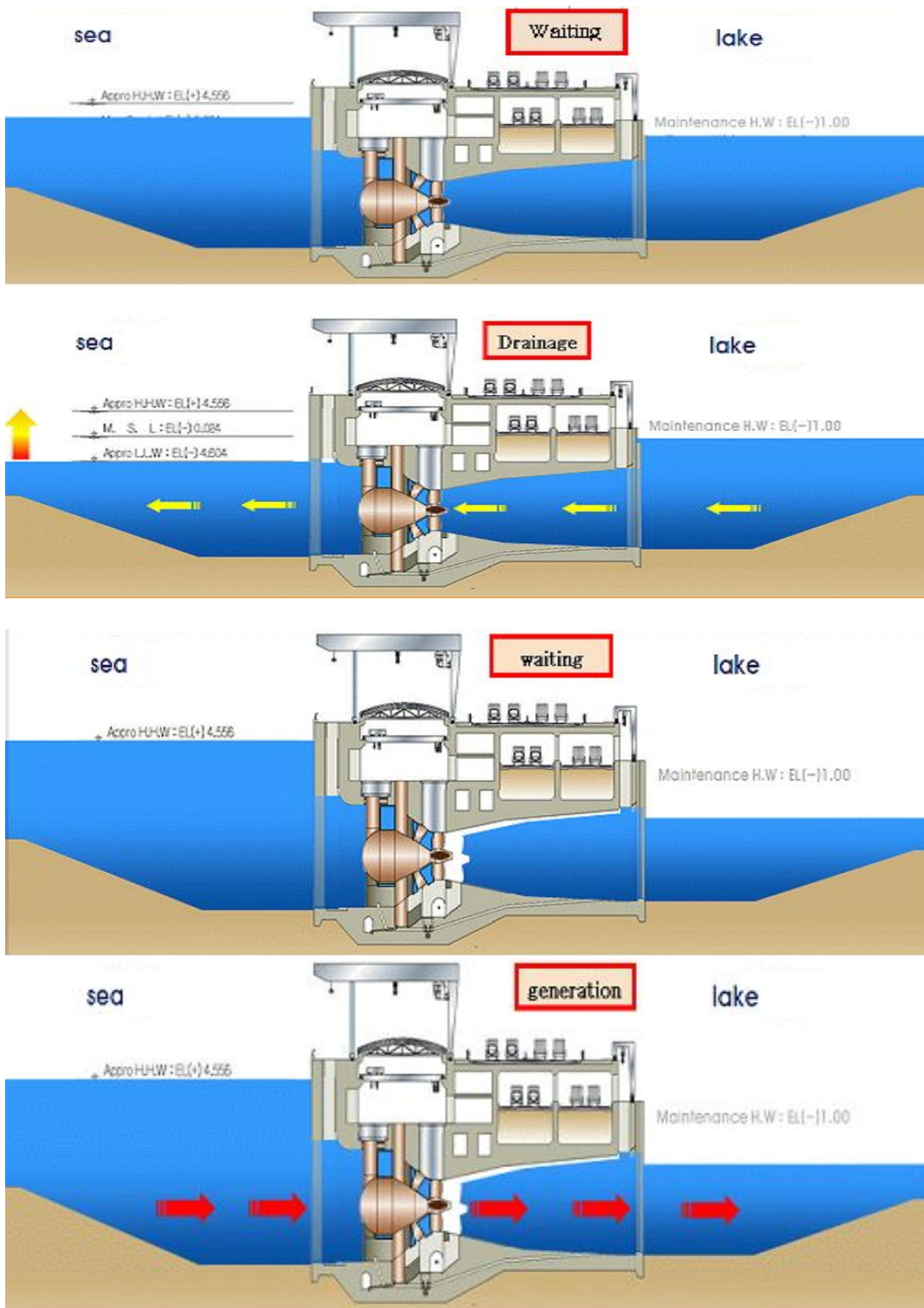


Figure 1. System Diagram of Sihwa Tidal Power Plant



**B.2. Post-registration changes****B.2.1. Temporary deviations from the registered monitoring plan, applied methodologies or standardized baselines**

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- K-water changed monitoring method of parameter  $GEN_y$  and  $EF_{BM}$ .  
(Undergoing approval process)

**B.2.2. Corrections**

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- **PRC-0349-001 (Approval date : 23/11/2012)**
  - K-water updated the project participant as a result of withdrawal of Ecoeye(consulting company).
  - K-water changed the abbreviation of Korea Water Resources Corporation from KOWACO to K-water.
  - K-water corrected the version number of the applied methodology (ACM0002) from version 3 to version 4.
- **PRC-0349-002 (Approval date : 03/05/2013)**
  - K-water corrected the geo-coordination of the power plant as follows:  
latitude : 126°4'W → 37°18'46"N  
longitude : 37°2'N → 126°36'36"E
- **PRC-0349-003 (Approval date : 30/10/2014)**
  - K-water corrected the abbreviation of Korea Water Resources Corporation from KOWACO to K-water.
  - K-water updated the monitoring structure according to the changes of role and responsibility of related monitoring departments.

**B.2.3. Changes to the start date of the crediting period**

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- Changed from 01/07/2009 to 01/07/2011 (Approval date of the change: 26/04/2011)

**B.2.4. Inclusion of monitoring plan**

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- Not applicable

**B.2.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other applied standards or tools**

&gt;&gt;

- **PRC-0349-001 (Approval date : 23/11/2012)**
  - K-water changed the type of watt-hour meters from bidirectional meters to unidirectional meters.
  - K-water changed the calibration frequency of watt-hour meters for measuring imported electricity from 2 years to 7 years.

**B.2.6. Changes to project design**

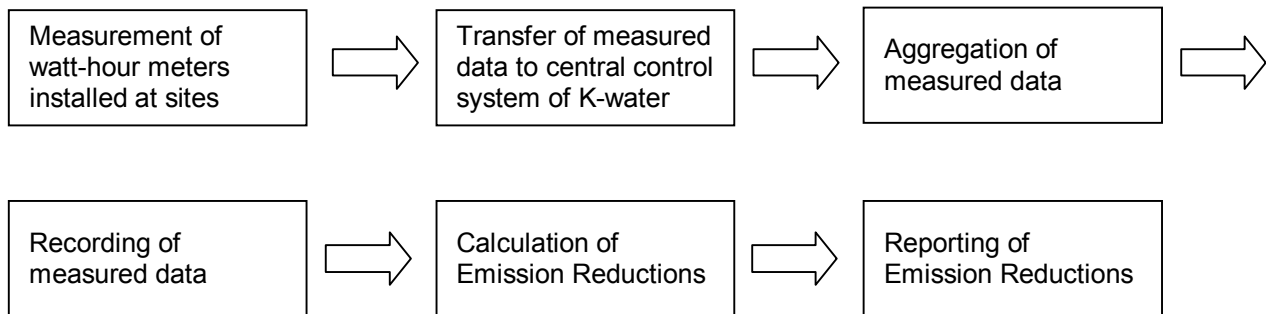
&gt;&gt;

- Not applicable

## SECTION C. Description of monitoring system

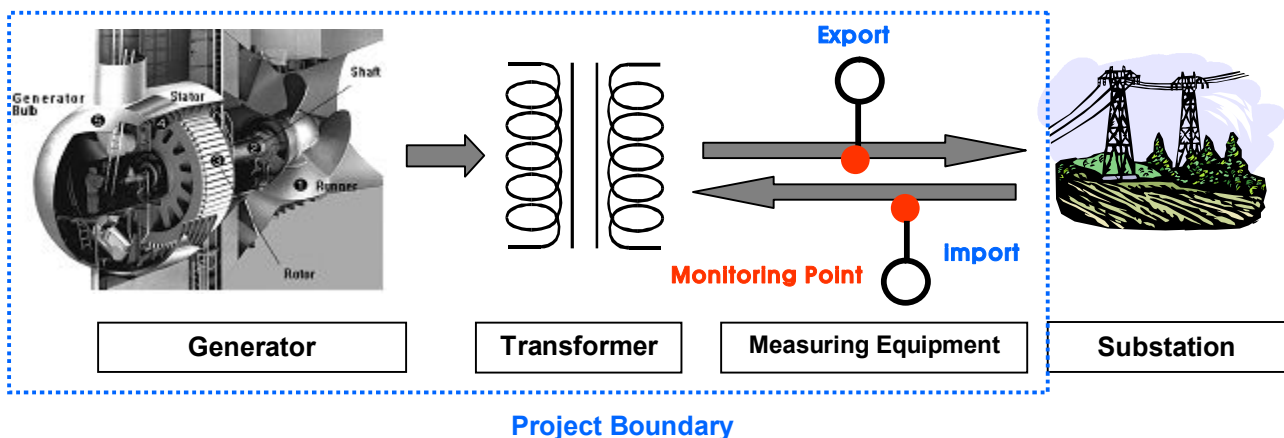
&gt;&gt;

- There are total 10 watt-hour meters installed for the monitoring system. All of watt-hour meters are installed at the project site. The watt-hour meters for SEND, a total of 6 meters, are installed in main line (154 kV). M1, M3 and M5 are the main watt-hour meters with accuracy range  $\pm 0.2\%$ . M2, M4 and M6 are the sub watt-hour meters with accuracy range  $\pm 0.5\%$ . The watt-hour meters for RECEIVE, a total of 4 meters, are installed with accuracy range  $\pm 0.5\%$ . M7, M8 and M9 are installed in main line (154 kV) and M10 is installed in back-up line (22.9 kV).



Procedure	Unit	Methods	Frequency
Data Measuring	kWh	Electronically	Continuously
Measured Data Transfer	kWh	Electronically	Exported electricity : Daily Imported electricity : Monthly
Measured Data Aggregation	kWh	Electronically	Exported electricity : Weekly Imported electricity : Monthly
Measured Data Recording	kWh	Electronically	Monthly
Emission Reductions Calculation	tCO <sub>2</sub>	Manual	After the related monitoring periods
Emission Reductions Reporting	tCO <sub>2</sub>	Manual	After the related monitoring periods

### Monitoring Points for the Project



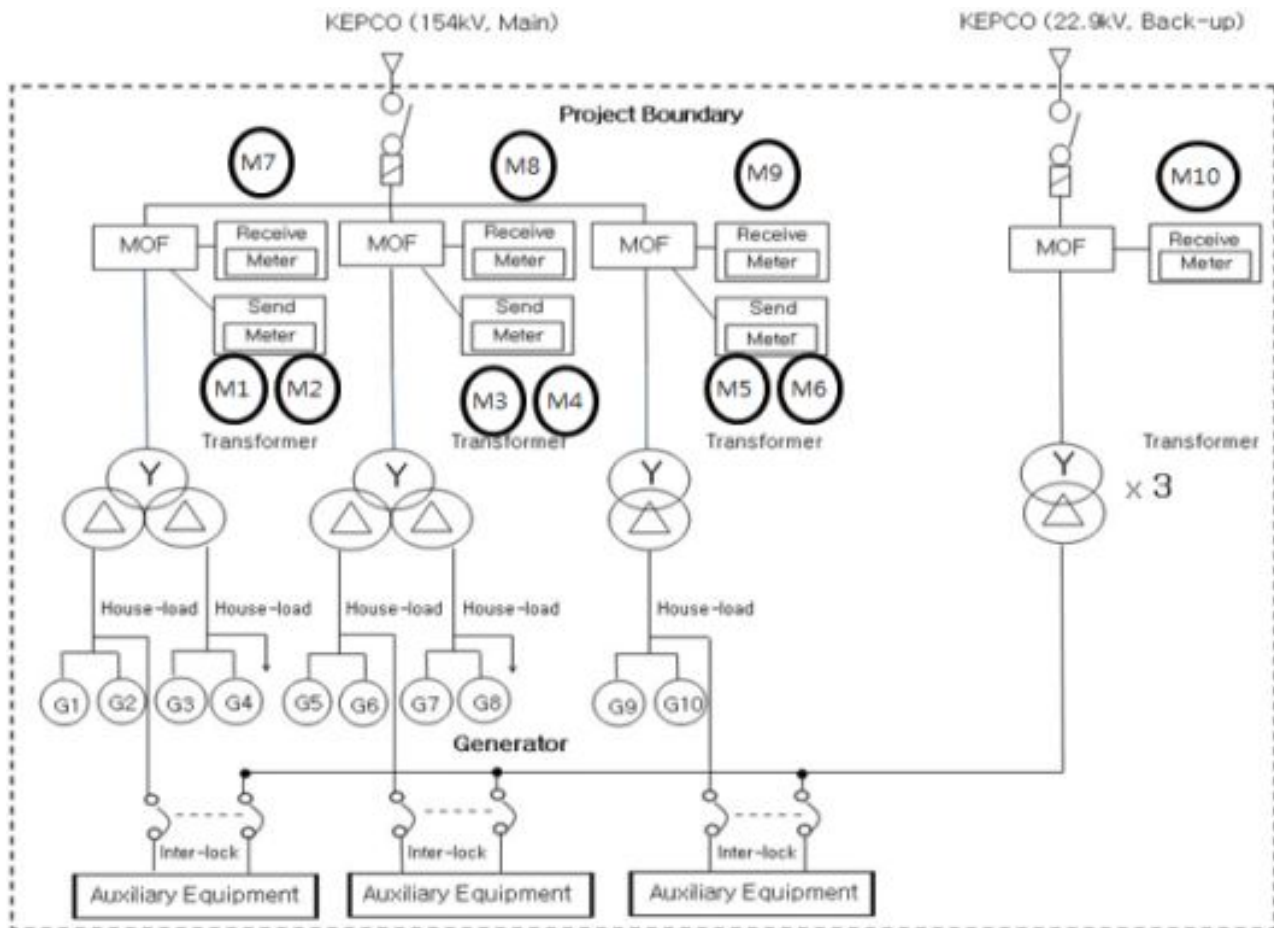


Figure 2. Skeleton diagram of the tidal power plant

- **QA/QC procedures**

**(Monitoring equipment)**

- Measuring meter of electricity exported to the grid was set up transparently in accordance with “Law regarding measurement” and “Act on operation of electricity market” then sealed after affirmation of Korea Power Exchange (“KPX”).
- The meters for exported electricity were calibrated when they were installed and those were supposed to be re-calibrated every two years after installation.
- The meters for imported electricity are under Korea Electric Power Corporation’s (hereinafter “KEPCO”) control and calibrated or replaced with new one by KEPCO every seven years according to the national law.
- The data of sub meter are transferred to the “Renewable energy metering information system” at the head office through a modem. And when the watt hour meter is not operating well, the data of sub meter are used.

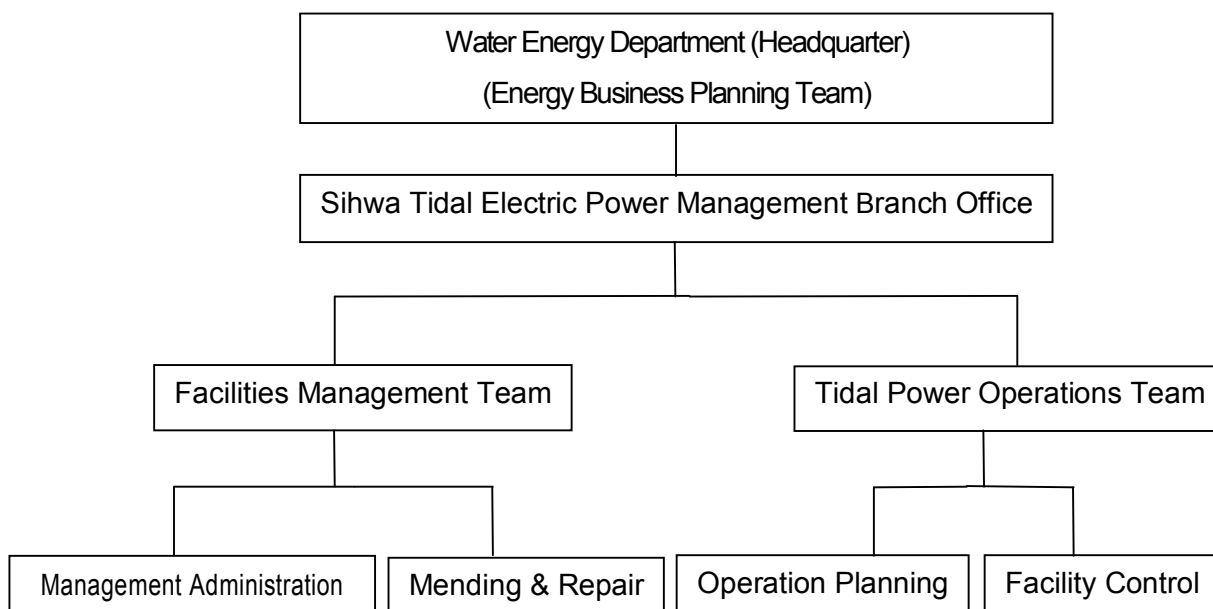
**(Monitoring of electricity amount)**

- The amount of electricity exported to the grid is measured electronically by installed meters.
- The measured data is simultaneously transferred to “central control system of K-water” and KPX.
- The measured amount of electricity is collected daily, weekly, and monthly and is archived in electronic way. The collected data of electricity exported to the grid was double checked with those of KPX.



**(Management of monitoring and electricity safety)**

- The person in charge of monitoring and electricity safety are appointed by the final decision-maker and in the case of absence of the responsible person, the second responsible person shall be selected.

**(Monitoring organization structure, roles and responsibilities)**

The role and responsibility of the respective monitoring departments and persons are as follows:

- R & R to measure the input-output electricity and maintain watt hour meters:  
Tidal Power Operations Team Member in Sihwa Tidal Power Office
- R & R to collect and record electricity data and to calculate BM emission factor.  
The person in charge of CDM in WaterEnergy Department
- R & R to check and correct the transmitted electricity by comparing the data of K-water and KPX. The person in charge of adjustment of electricity trading in Water Energy Department

\* The name of department, team or position in charge can be changed according to reorganization in K-water.

**(Emergency procedure)**

- In case unexpected accident which affects Emission Reductions is occurred, the person in charge of monitoring should report to the responsible department(Energy Business Planning Team) and act according to the internal manual, namely, "Sihwa Tidal Power Plant Operation Manual" in emergency.
- In case measuring meters of the electricity exported to the grid are improperly operated or the transfer of data is in error, internal investigation and correction procedure shall be followed and certified by the final decision-maker of K-water's Water Energy Department and KPX in accordance with "Act on operation of electricity market".

**SECTION D. Data and parameters****D.1. Data and parameters fixed ex ante**

<b>Data/parameter:</b>	EF <sub>OM</sub>
Unit	tCO <sub>2</sub> /MWh
Description	operating margin emission factor
Source of data	Registered PDD
Value(s) applied	0.7710
Choice of data or measurement methods and procedures	This value was calculated according to the methodology ACM0002 (ver.4). Applied value was calculated by referring Statistics of Electric Power in KOREA (2002, 2003, 2004) (from Korea Electric Power Corporation)
Purpose of data:	Calculation of baseline emissions or baseline
Additional comments	This value is supposed to be calculated once at the time of PDD submission.

**D.2. Data and parameters monitored**

<b>Data/parameter:</b>	EF <sub>BM</sub>
Unit	tCO <sub>2</sub> /MWh
Description	build margin emission factor
Measured/calculated/default	Calculated
Source of data	2017 Statistics of Electric Power in KOREA (KEPCO) and 2017 Status of Generation Facility (KPX)
Value(s) of monitored parameter	0.4513
Monitoring equipment	N/A
Measuring/reading/recording frequency:	Yearly
Calculation method (if applicable):	<p>This value was calculated as</p> $-\left[\sum_{i,m} F_{i,m,y} \cdot \text{COEF}_{i,m}\right] \div \left[\sum_m \text{GEN}_{m,y}\right]$ <p>over recently built power plants defined in the baseline methodology according to the ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 4.</p> <p>* In power plants that fuel consumption data are not available(no data source), <math>\left[\sum_i F_{i,m,y} \cdot \text{COEF}_{i,m}\right]</math> was replaced with <math>\left[(\text{GEN}_{m,y} \cdot 3.6 \div \eta_m) \cdot \text{EF}_{\text{co2},i} \cdot \text{OXID}_i\right]</math>.</p> <p>EF<sub>co2,i</sub> is the CO<sub>2</sub> emission factor of the fuel i per unit of energy. OXID<sub>i</sub> is the oxidation factor of fuel and η is the default efficiency provided in Table 2, Appendix of TOOL09:"Determining the baseline efficiency of thermal or electric energy generation systems"</p> <p>(For details refer to the BM sheet)</p>
QA/QC procedures:	N/A
Purpose of data:	<p>Calculation of baseline emissions</p> <ul style="list-style-type: none"> <li>- This value was calculated according to the methodology ACM0002 (ver.4).</li> <li>- Applied value was calculated by referring 2017 Statistics of Electric Power in KOREA (KEPCO) and 2017 Status of Generation Facility (KPX).</li> <li>- This value is used for CO<sub>2</sub> emissions factor of grid (EF).</li> </ul>
Additional comments:	This value is updated according to the methodology ACM0002 (ver.4) every year.

<b>Data/parameter:</b>	F <sub>i,y</sub>
Unit	Mass or Volume

Description	Amount of each fossil fuel consumed by each power plant i : bituminous, heavy oil, diesel oil, LNG y : year
Measured/calculated/default	Measured
Source of data	2017 Statistics of Electric Power in Korea (KEPCO)
Value(s) of monitored parameter	N/A
Monitoring equipment	N/A
Measuring/reading/recording frequency:	Yearly
Calculation method (if applicable):	N/A
QA/QC procedures:	N/A
Purpose of data:	Calculation of baseline emissions
Additional comments:	N/A

<b>Data/parameter:</b>	NCV <sub>i,y</sub>
Unit	kcal/ mass or volume unit
Description	Net calorific value of fuel i : bituminous, heavy oil, diesel oil, LNG y : year
Measured/calculated/default	Calculated
Source of data	2017 Statistics of Electric Power in Korea (KEPCO)
Value(s) of monitored parameter	N/A
Monitoring equipment	N/A
Measuring/reading/recording frequency:	Yearly
Calculation method (if applicable):	These values were calculated as - Calorific consumption of each plant ÷ $F_{i,m,y} \times 0.95$ for liquid and solid fossil fuels - Calorific consumption of each plant ÷ $F_{i,m,y} \times 0.90$ for natural gas
QA/QC procedures:	N/A
Purpose of data:	Calculation of baseline emissions
Additional comments:	This value was applied during the monitoring period.

<b>Data/parameter:</b>	COEF <sub>i</sub>
Unit	tCO <sub>2</sub> /GJ
Description	CO <sub>2</sub> emission coefficient factor of fuel i i : bituminous, heavy oil, diesel oil, LNG
Measured/calculated/default	Calculated
Source of data	NCV <sub>i</sub> : 2017 Statistics of Electric Power in Korea (KEPCO) EFco <sub>2,i</sub> : Default values provided in IPCC 1996 Revised Guidelines for National Greenhouse Gas Inventories OXID <sub>i</sub> : Guideline for the greenhouse gas and energy target management operation (30.12.2016, Korea)
Value(s) of monitored parameter	N/A
Monitoring equipment	N/A
Measuring/reading/recording frequency:	Yearly
Calculation method (if applicable):	This value was calculated as [NCV <sub>i</sub> · EFco <sub>2,i</sub> · OXID <sub>i</sub> ] according to the ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 4

QA/QC procedures:	N/A
Purpose of data:	Calculation of baseline emissions
Additional comments:	This value was applied during the monitoring period.

<b>Data/parameter:</b>	EF <sub>y</sub>
Unit	tCO <sub>2</sub> /MWh
Description	CO <sub>2</sub> emissions factor of grid
Measured/calculated/default	Calculated
Source of data	Calculated
Value(s) of monitored parameter	0.6111
Monitoring equipment	N/A
Measuring/reading/recording frequency:	Yearly
Calculation method (if applicable):	This value was calculated according to the methodology ACM0002 (ver.4). Applied value was calculated by referring 2017 Statistics of Electric Power in Korea (KEPCO)
QA/QC procedures:	N/A
Purpose of data:	Calculation of baseline emissions - This value is used for baseline emission calculations
Additional comments:	This value is supposed to be calculated at the time of PDD submission and recalculated at the time of this monitoring due to the update of EF <sub>BM</sub> * changed from 0.6214 to 0.6111

<b>Data/parameter:</b>	EG <sub>y</sub>
Unit	MWh
Description	Net amount of electricity transmitted to the grid excluding electricity consumed in the Sihwa tidal power plant
Measured/calculated/default	Measured and Calculated
Source of data	Watt-hour meter
Value(s) of monitored parameter	Net electricity generation is 241,808.692MWh - Total electricity transmitted to the grid is 243,884.296MWh - Total imported electricity is 2,075.604MWh
Monitoring equipment	1. Exportation Measurement equipment: Watt-hour meter Accuracy: Allowable error range ± 0.2% Serial Number : PT-0909A407-01, PT-0909A408-01, PT-0909A409-01 Calibration information - Number of meters : 3 meters* - Calibration Frequency : within 2 years - Date of last calibration : 11/10/2016 (previous : 22/10/2015) - Validity period : 11/10/2016 –10/10/2018  * The below is the information of additional 3 sub-meters  Accuracy : Allowable error range± 0.5% Serial Number : 53048162, 53048163, 53048164 Calibration information - Number of meters : 3 meters - Calibration Frequency : within 2 years - Date of last calibration : 11/10/2016 (previous : 22/10/2015) - Validity period : 11/10/2016 –10/10/2018

	<p>2. Importation</p> <p>Measurement equipment : Watt-hour meter</p> <p>Accuracy : Allowable error range <math>\pm 0.5\%</math></p> <p>Serial number : 8175017820, 8175017821, 8175017822</p> <p>Calibration information</p> <ul style="list-style-type: none"> <li>- Number of meters : 3 meters</li> <li>- Calibration Frequency : within 7 years</li> <li>- Date of last calibration : 04/04/2017</li> <li>- Validity period : 04/04/2017 – 30/04/2024*</li> </ul> <p>* The below is the information of the one sub watt-hour meter to measure the imported electricity from 22.9kV transmission line in emergency.</p> <p>Accuracy : Allowable error range <math>\pm 0.5\%</math></p> <p>Serial Number : 25162020294</p> <p>Calibration information</p> <ul style="list-style-type: none"> <li>- Number of meters : 1 meter</li> <li>- Calibration Frequency : within 7 years</li> <li>- Date of last calibration : 08/12/2016</li> <li>- Validity period : 08/12/2016 – 31/12/2023*</li> </ul> <p>* These meters are recalibrated every 7 years. They were replaced by KEPCO as new meters before expiry date of calibration validity, the first day of next month of the previous calibration date, according to the national law "Measures act".</p>
Measuring/reading/recording frequency:	<p>Measuring : Continuously</p> <p>Reading : Daily</p> <p>Recording : Monthly</p>
Calculation method (if applicable):	N/A
QA/QC procedures:	The amount of electricity transmitted to the grid was electronically measured and transferred to Korea Power Exchange (KPX) and K-water, so it was double checked by both entities. The amount of imported electricity from the grid was double checked against receipt of sales.
Purpose of data:	Calculation of baseline emissions
Additional comments:	N/A

<b>Data/parameter:</b>	GEN <sub>y</sub>
Unit	MWh/each plant
Description	Electricity generation of each power plant
Measured/calculated/default	Measured and calculated
Source of data	2017 Statistics of Electric Power in Korea (KEPCO), 2017 Status of Generation Facility (KPX)
Value(s) of monitored parameter	See the BM calculation spreadsheet
Monitoring equipment	N/A
Measuring/reading/recording frequency:	Yearly



Calculation method (if applicable):	<p>(1) In fossil fuel fired power plants(including IGCC plant) and nuclear power plants, this value was obtained from “2017 Statistics of electric power in Korea('18.6)” produced by KEPCO every year.</p> <p>(2) In fuel cell and renewable(excluding solar) power plants, this value was calculated by plant capacity and plant utilization factor of each units as follows:  <math>[Capacity_m \times 24h \times 365days \times \text{plant utilization factor}_m]</math></p> <p>(3) In solar plants, which respective plant capacity is not available, this value was calculated as follows:  <math>[Annually \text{ increased total capacity} \times 24h \times 365days \times \text{plant utilization factor}]</math></p> <p>- Capacity : 2017 Status of Generation Facility (KPX)  - Plant utilization factor : 2017 Statistics of Electric Power in Korea (KEPCO)</p>
QA/QC procedures:	N/A
Purpose of data:	Calculation of baseline emissions
Additional comments:	N/A

### D.3. Implementation of sampling plan

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- Not applicable

## SECTION E. Calculation of emission reductions or net anthropogenic removals

### E.1. Calculation of baseline emissions or baseline net removals

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- According to the formula below, baseline emissions for this project is **147,769 tCO<sub>2</sub>**

$$BE_y = EG_y^* \times EF_y$$

BE <sub>y</sub>	=	Baseline emissions(tCO <sub>2</sub> )
EG <sub>y</sub> <sup>*</sup>	=	Net electricity generation(MWh)
EF <sub>y</sub>	=	Baseline emission factor(tCO <sub>2</sub> /MWh)

Year	Month	Electricity (kWh)	Baseline Emission Factor (tCO <sub>2</sub> /MWh)	Emission Reductions (tCO <sub>2</sub> )
2018	1	42,436,746	0.6111	25,949.595
2018	2	36,724,882	0.6111	22,442.575
2018	3	43,358,236	0.6111	26,496.218
2018	4	41,282,890	0.6111	25,227.974
2018	5	41,925,614	0.6111	25,620.743
2018	6	38,128,928	0.6111	23,300.588
<b>Total Electricity exported to the grid(A)</b>		<b>243,884,296</b>		<b>149,037.693</b>
2018	1	320,280	0.6111	195.723
2018	2	288,960	0.6111	176.583
2018	3	366,240	0.6111	223.809
2018	4	356,136	0.6111	217.635
2018	5	362,628	0.6111	221.602
2018	6	381,360	0.6111	233.049
<b>Electricity imported from the grid(B)</b>		<b>2,075,604</b>		<b>1,268.401</b>
<b>Net electricity generation (A-B)</b>		<b>241,808,692</b>	0.6111	<b>147,769.292</b>

**E.2. Calculation of project emissions or actual net removals**

&gt;&gt;

- GHG emissions due to the project activity are not occurred.  
Project emission is zero;  
 $PE = 0$

**E.3. Calculation of leakage emissions**

&gt;&gt;

- No leakage occurs in accordance with ACM0002 (ver4)  
 $L = 0$

**E.4. Calculation of emission reductions or net anthropogenic removals**

- $ERy = BEy - PEy - Ly$

	Baseline GHG emissions or baseline net GHG removals (t CO <sub>2</sub> e)	Project GHG emissions or actual net GHG removals (t CO <sub>2</sub> e)	Leakage GHG emissions (t CO <sub>2</sub> e)	GHG emission reductions or net anthropogenic GHG removals (t CO <sub>2</sub> e)		
				Before 01/01/2013	From 01/01/2013	Total amount
<b>Total</b>	147,769	-	-	-	147,769	147,769

**E.5. Comparison of emission reductions or net anthropogenic removals achieved with estimates in the registered PDD**

Amount achieved during this monitoring period (t CO <sub>2</sub> e)	Amount estimated ex ante (t CO <sub>2</sub> e)
147,769	156,423

**E.6. Remarks on increase in achieved emission reductions**

&gt;&gt;

- This project was estimated to reduce 156,423 tCO<sub>2</sub> according to the registered CDM-PDD for the relevant monitoring period. However, actual reduction is 147,769 tCO<sub>2</sub> and the net electricity supplied to the grid was 241,808,692 kWh. This shows that actual value was lower by 8,654 tCO<sub>2</sub> than the estimated value in CDM-PDD with the result of the decrease of BM factor.

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**Document information**

<i>Version</i>	<i>Date</i>	<i>Description</i>
06.0	7 June 2017	Revision to: <ul style="list-style-type: none"> <li>• Ensure consistency with version 01.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN);</li> <li>• Make editorial improvements.</li> </ul>
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: <ul style="list-style-type: none"> <li>• Include provisions related to delayed submission of a monitoring plan;</li> <li>• Provisions related to the Host Party;</li> <li>• Remove reference to programme of activities;</li> <li>• Overall editorial improvement.</li> </ul>
04.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> <li>• Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0));</li> <li>• Include provisions related to standardized baselines;</li> <li>• Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1;</li> <li>• Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>;</li> <li>• Editorial improvement.</li> </ul>
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB 70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01.0	28 May 2010	EB 54, Annex 34. Initial adoption.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: monitoring report		