Appendix

25th October, 2006

An Example of the IERE TIS Activities : Proposal of the IERE TIS-Asia (DRAFT)

1. Objective of TIS-Asia

(1) TIS-Asia, which is one of IERE TIS activities, aims at finding common or country specific problems in Asia Region, in the fields of Construction, Operation and Maintenance of electricity power facilities, Global environmental issues, etc.

TIS-Asia also aims at establishing mechanisms to practically provide solutions to them.

(2) Through above activities, TIS-Asia aims at 'supporting to activate technology cooperation, transfer, R&D on common subjects and to clarify technical requirements to solve issues in Asia, etc.' as well as at 'increasing values of IERE members'.

2. Who executes TIS -Asia Activity?

IERE members shall contribute to TIS-Asia activities under the supports of IERE Central Office.

3. Outline of the TIS-Asia Activity

- (1) TIS-Asia Steering Committee (TIS-Asia-SC)
 - 1) 'TIS-Asia-SC', which consists of Managing Directors in charge of Technical matters from Utilities, Research institute and Venders in Asia*, summarizes problems in Asia and identifies major issues.

*: Ex. China, Japan, Korea, Taiwan and South Eastern counties, etc.

- 2) 'TIS-Asia-SC' also carries out check and review of ongoing TIS-Asia-WG activities, discusses reinforcing measures, etc. and advises.
- 3) 'TIS-Asia-SC' sets up TIS-Asia-WGs to solve the selected problem, considering priority, regional commonness and practicability.
- 4) 'TIS-Asia-SC' discusses common topics for TIS-Asia-WG's subjects such as Fund or Technology Transfers, etc.
- 5) 'TIS-Asia' is held every year after 2007. (cf. 7. Example of TIS-Asia program)

Following activities are under 'TIS-Asia-SC'.

- (2) TIS-Asia Working Groups (TIS-Asia-WG)
 - 1) TIS-Asia-WG is set up hereafter and acts to solve practically problems in Asia.
 - 2) A new 'TIS-Asia-WG' makes its action policy, recruits participants and decides concrete contents of its activity.
 - 3) On going 'TIS-Asia-WGs' make concrete reinforcing measures of its activities

referring to discussions at TIS-Asia and TIS-Asia-SC.

4) Head (leader) and vice head of 'TIS-Asia-WG' are also members of 'TIS-Asia-SC'.



IERE members shall contribute to organize whole TIS-Asia activities and prepares TIS-Asia-SC and TIS-Asia-WG under the supports of IERE Central Office.

4. Examples of issues to solve

- (1) Common technical issues
 - * Improvement of Generation and Transmission efficiencies
 - * Development of Technologies to solve Environmental issues (NOx, SOx)
 - * Improvement of energy consumption efficiency in demand side
 - * Micro Grid for electrification, etc.
- (2) Particular technical issues of each country
 - * Countermeasures to natural disasters (against earthquake or typhoon)
 - * Insulation technologies (against high temperature and humid, or damage from salt water)
 - *Operation and maintenance technologies
 - (Technologies differ depending on technical ability in each country)
- (3) Improvement and implementation of Fundamental issues, etc.
 - *Making Data Base on regional technical issues
 - *Human resources exchange, setting up human Network Data Base
 - *R&D roadmap, Cooperative R&D

5. Preparation for TIS-Asia

Major technical issues and needs in Asia region countries are surveyed and summarized as a list in advance to prepare TIS-Asia.

- (1) Published Information.
- (2) Business Trip to expected organizations in Asia

IERE members shall contribute to prepare under the supports of Central Office.

6. Potential TIS-ASIA Members

- (1) Asia Region
 - 1) Present IERE Member

Hon Kong SAR:CLP Research Institute, JAPAN:TEPCO,etc., KOREA:KEPCO,etc., Malaysia:TNB, P.R.China:Chinese EPRI, Taiwan:TPC,

- 2) Non IERE Member so far Indonesia (PT PLN), Thailand, Vietnam, Singapore, etc.
- (2) Besides Asia Region TIS-Asia is open for all IERE members.

7. Example of TIS-Asia program

1st TIS-Asia: Nov. 2007, in Singapore or Tokyo

- (1) TIS-ASIA-SC
 - (1st Day: Managing Directors, TIS-Asia-WG Head and Vice Head and IERE Central office staff, etc. participate)
 - 1) Confirmation of the Objective, activity-contents and the direction of TIS-ASIA.
 - 2) Discussion about major issues in Asia. (Common or individual problems)
 - 3) Check & Review of TIS-Asia-WG activities.
 - 4) Setting up TIS-Asia-WGs to solve the newly selected problems.
 - 5) Discussing common topics for WG's subjects such as Fund or Technology Transfers, etc.
- (2) TIS-ASIA Working Group* (TIS-Asia-WG)

(2nd Day: Each TIS-Asia-WG members participate.)

- Making concrete reinforcing measures of its activities referring to discussions at TIS-ASIA-SC
 - 1) Detailed analysis on each individual issue.
 - 2) Discussions on solution method including required fund.)
 - 3) Making action plans.
 - *: TIS-Asia-WGs make actions through the year.
 - *: Examples of WG subjects: Improving present thermal power plants efficiency WG'. 'Examining skills for facilities and materials & Maintenance Guideline WG', etc.

8. Fund for TIS-ASIA

Budget from IERE reserved fund	Needs Survey Trips	Support for Participations of Asian Key Persons	Operation of the meeting
2007 1st TIS-Asia	10,000USD	30,000USD	10,000USD
2008 2nd,2009 3rd TIS-Asia	5,000USD	10,000USD	5,000USD

(90,000USD/3year)

(1) Utilization of IERE Reserved Fund

IERE Reserved Fund is used as follows about TIS-ASIA.

- 1) Needs survey to Asia Region (business trip, etc.)
- 2) Support for participation of Asian Key Persons
- 3) Operation of the meetings
- (2) Efforts to get Public Funds in the future

In the long term, efforts to obtain Public fund by World Bank, U.N., etc are performed to enlarge IERE regional activities including TIS-Asia.

9. Increase of the Values of IERE expected by TIS-Asia

- (1) Raising the Values of IERE Members
- Through above activities, each IERE member receives following Benefits.
 - 1) Utilities and Research Institutes >
 - (a) Each member can communicate with utilities and research institutes in other countries and can enlarge its human networks. Consequently increase of IERE members is promoted.
 - (b) 'Utilities and Research Institutes who have problems' can get concrete measures to solve them. They can also obtain bench marks on major technological issues in Asia.
 - (c) 'Utilities and Research Institutes who have technologies or information to solve problems' may carry out Technology transfers or CDM. They can also build human resources and succeed skills through such solutions.
 - (d) Technical requirements to practically solve Asian particular problems can be clarified.
 - 2) Venders
 - (a) Making the list of issues in each Asian country, they can promote their global business strategy.
 - (b) Solving each problem, they can expand their solution business.
 - 3) Universities
 - (a) Grasping problems of industries, they can find opportunities to set up joint industry-university research projects.

(2) Reinforce operational foundation of IERE

TIS-Asia is expected to lead to increase the values of IERE, number of members and annual income from member fee, and to strengthen the operational foundation of IERE in the long term.

Ex. + 1 Executive Member + 6,000USD +10 Regular Members + 15,000USD

Total +21,000 USD / year (105,000 USD / 5 year)

(Ref.: TIS-Asia utilization form IERE reserved Fund for 3 years: 90,000USD)