



AGENDA

**SRI LANKAN EXECUTIVE EXCHANGE VISIT
TO THE
INTERCONNEXION FRANCE –
ANGLETERRE
(FRANCE – ENGLAND INTERCONNECTOR)**

February 24 – March 3, 2007

London, England & Paris, France

**Conducted by the
U.S. ENERGY ASSOCIATION
Under the
SOUTH ASIA REGIONAL INITIATIVE FOR ENERGY (SARI/ENERGY)
Funded by the
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT**

DRAFT AGENDA FOR EXECUTIVE EXCHANGE

GOAL: The Executive Exchange is designed to examine the policy, technical, institutional, economic and financial requirements involved in the creation of the England – France 2,000 MW HVDC submarine link between the French and British transmission systems. During the visit, participants will have the opportunity to meet with operators, regulatory bodies, and policy makers of the two respective countries and discuss the history, technical, legal and regulatory issues, and operations involved in the link.

Issues to be examined during the executive visit include the installation of the line, the structure and procedures of the transmission system operator, and the policy development and regulatory oversight of the cross-border connection.

This exchange will lead to an improved understanding of , , of future cooperation with the United States Agency for International Development and the United States Energy Association in establishing a regional power market in India.

OBJECTIVES:

- Discuss the salient features of a power exchange including: infrastructural requirements for setting it up, risk management and market management, products and services given by a power exchange and the fees charged, types of contracts, formulating futures and options, forecasting methodologies for bulk trade, relationships between the entities involved in trading, regulation, and kinds of customer interfaces.
- Discuss the roles of traders (of both physical as well as financial products) in a market with a power exchange.

OUTCOMES:

- Knowledge & documentation on policy initiatives behind the establishment of an electricity link , including relevant political, technical and social drivers of the initiative
- Knowledge & documentation on the history & sequence of activities relating to the establishment
- Knowledge & documentation on the technical issues relating to the planning and design of the link
- Knowledge & documentation on the legal and regulatory issues relating to the operating of the link
- Knowledge & documentation on the Power Purchase Agreements with regard to tariff, quantum of power transferable, etc.
- Knowledge & documentation on the operations of the link by both countries

Executive Exchange Participants

Sri Lanka

Mr. M.M.C. Ferdinando
Secretary
Ministry of Power and Energy
&
Co- Chairman of the Steering Committee

Mr. Tissa Herath
Additional Secretary (Technical)
Ministry of Power and Energy
&
Member of the Steering Committee

Mr. D.R. Pullaperuma
General Manager
Ceylon Electricity Board
&
Member of the Steering Committee

Prof Priyantha Wijayatunga
Director General
Public Utilities Commission
&
Member of the Steering Committee

USAID

Mr. Upali Daranagama
Project Management Specialist, Energy
US Agency for International
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Mr. Ranjith Gunawardena
Additional General Manager
Ceylon Electricity Board
&
Co- Chairman of the Task Force

Ms. Kamani Jayasekera
Chief Engineer (Transmission Planning)
Ceylon Electricity Board
&
Member of the Task Force

Dr. Herath Samarakoon
Chief Engineer (Generation Planning)
Ceylon Electricity Board
&
Member of the Task Force

USEA

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PRIMARY OBJECTIVES:

- Learn about & obtain documentation on policy initiatives behind the establishment of the electricity link between Britain and France
 - Drivers of the initiative – Political/Technical/Social
- Learn about & obtain documentation on the history and the sequence of activities relating to the establishment of the IFA
- Learn about & obtain documentation on the technical issues relating to the planning and designing the link
- Learn about & obtain documentation on the legal and regulatory issues relating to operation of the link
- Learn about & obtain documentation on Power Purchase Agreements with regard to tariff, quantum of power transferable etc.
- Learn about & obtain documentation on the operation (technical) of the link by both countries since its establishment
 - How the operation was affected by sector reforms in England and Wales in 1990

February 24, 2007

02:15 depart Colombo for London Heathrow
08:45 arrive London
SriLankan Airlines (UL) – 505

Transportation Company:

Chauffeurs UK Ltd.
Contact: Matthew (Tel: +44-(0) 20-8404-2356; Info@chauffeur.org.uk)

Lodging: The Sheraton Park Lane Hotel

Piccadilly, London W1J 7BX, U.K.
Tel +44 (0)20 7290 7352
Fax +44 (0)20 7290 7566
Contact: Jerilee Pinto - Events Planner (Tel: 44 207 290 7354; Fax: 44 207 290 7566;
jerilee.pinto@sheraton.com)

DAY 1: MONDAY, FEBRUARY 26, 2007

08:45 Depart for meeting at National Control Centre (*drive of approximately 1 hour*)

Visit to the National Grid Control Centre – Wokingham

Speakers: Christopher Proudfoot, Operational Issues Manager
(Tel: +44 (0) 1189 363241; christopher.proudfoot@uk.ngrid.com)

Iain McIntosh, Senior Trader, Operations & Trading

Location: St. Catherine's Lodge, National Grid Control Centre, Bearwood Road, Sindlesham,
Nr Wokingham, Berkshire RG41 5BN

10:00 Welcome & Introductions

10:10 Overview of National Grid and Electricity Operations

- 10:55 Visit to Control Room Viewing Gallery**
- 11:15 Operation of the IFA (Interconnector France Angleterre) from a GB System Operation Perspective**
- 11:35 Break**
- 11:45 Trading on the IFA**
Speaker: Iain McIntosh, Electricity Trading Manager
- 11:55 Working Lunch**
- 12:30 Departure for Sellindge** (*drive of 1¾ hours approximately*)

Meeting with the National Grid Interconnectors Ltd. & Sellindge Converter Station

Contact: Simon McVeigh, IFA Manager (+44-(0)-1926-65-3000; simon.mcveigh@uk.ngrid.com)

National Grid Plc. owns, operates and develops the high-voltage electricity transmission network in England and Wales and Great Britain's principal natural gas transportation system. Their portfolio of other businesses is mainly concerned with infrastructure provision and related services. These businesses operate in areas such as wireless network infrastructure for broadcast and mobile telephones, metering, LNG import, interconnectors and property. In August of 2006 National Grid Interconnectors Limited was established and incorporated as a wholly owned subsidiary of National Grid Plc, to jointly own and operate the Interconnexion France Angleterre (IFA) with RTE SA (the French transmission system operator).

The Sellindge Converter Station is located on a 14 hectare site, and includes 400 kV harmonic filters, two static var compensators and an indoor 400 kV GIS substation.

- 14:30 Welcoming & Introductions**
- 14:35 Overview of the National Grid Interconnectors Ltd.**
- Organization, governance and enabling policies
 - System supply, demand and transmission constraints
 - Operational guidelines
- 15:00 Overview of the England-France Interconnector (IFA)**
- History & sequence of activities leading up to the establishment of the connection
 - Overview of the UK Electricity Market – history & development leading up to the cable
 - Technical issues relating to the planning and designing of the link

- 15:30 Coffee & Tea Break**
- 15:15 Overview of IFA Operations**
- Access rules
 - Overview of the auction mechanism for capacity
 - Power purchase agreements with regard to tariff, quantum of power transferable, etc.
 - Handling of transmission congestion
 - Video of Landing Point at Baker's Gap
- 15:45 Overview of Operations of Converter Station & Site Tour**
- 16:30 Close of Day Two & Return Drive to London** (*approximately 1 hour drive*)
- 18:00 Arrive at hotel**
- 19:30 Welcoming Dinner Hosted by USEA** – *tentative*

DAY 2: TUESDAY, FEBRUARY 27, 2007

- 09:30 Depart for Ofgem**

Meeting with the Office of Gas and Electricity Markets (Ofgem)

Contact: Min Zhu (Min.Zhu@ofgem.gov.uk)

Speakers: Robert Hull, Director of Transmission

Gary Craig, Manager in the European Affairs Team

Location: 9 Millbank, London SW1P 3GE

Ofgem is the regulator for Britain's gas and electricity industries. Ofgem's principle objective is to protect the interests of electricity and gas consumers, wherever appropriate by promoting effective competition. Ofgem also has statutory duties in furtherance of the principle objective in relation to, among other things, security of supply, economic, environmental and social matters.

- 10:00 Overview of the Ofgem**
- Organization, governance and enabling policies
- 10:30 Overview of the Regulation of the England-France Interconnector (IFA)**
- 11:00 Coffee & Tea Break**
- 11:15 Overview of the Regulation of the England-France Interconnector (IFA) – cont.**

12:00 Working lunch

13:45 Depart for DTI

Meeting with the Department of Trade & Investment (DTI)

Speaker: Sue Harrison, Head of European Energy Markets (sue.harrison@dti.gsi.gov.uk)

Location: 1 Victoria Street, London SW1H 0ET

The Department of Trade & Investments implements energy policy of the United Kingdom. DTI has a wide range of responsibilities covering company law, trade, business growth, innovation, employment law, regional economic development, energy, science, and consumer law.

Specifically, DTI advises and deals with a range of trade policy, regimes, procedural issues governing imports into the UK, including:

- Import Tariffs
- Import Licensing
- Duty Suspensions and Tariff Quotas including information on making applications, procedures & other EU Schemes involving duty relief

14:00 Overview of DTI

- Organization, governance and enabling policies

14:30 Overview of the DTI's role in the formation of the England-France Interconnector

15:30 Coffee & Tea Break

15:00 Overview of the DTI's role in the formation of the IFA – cont.

17:30 Close of Day Two

DAY 2: WEDNESDAY, FEBRUARY 28, 2007

AM Check out of hotel

13:30 Depart for Dover– for transport to Calais, France via ferry
(approximately 1 ½ hour drive)

15:30 Depart Dover for Calais, France – time approximate

16:15 Arrive in Calais, France & check into hotel – time approximate

Lodging: Suitehotel Calais Coquelles
Place de Cantorbery, 62231 Coquelles, France
Contact: Cédric FAYOLLE, General Manager
Tél. +33 (0)3 21 19 50 00, Fax. +33 (0)3 21 19 50 05

DAY 4: THURSDAY, MARCH 1, 2007

09:00 **Check-out of hotel and depart for Sangatte** (approximately 10 min drive)

Site Visit to Les Mandarins Converter Station – RTE
Contact: Philippe Adam (philippe.adam@rte-france.com)
Speakers: Emilie Thiollet, Maintenance Engineer
 Vincent Posca, Area Operation Manager
Location: see map

09:30 **Overview of Operations of Converter Station**

12:30 **Lunch**

Site Visit to RTE North –East System Control Center (SENE)
Location: 913, avenue de Dunkerque, 59160 Lomme
Speakers: Jean Pompee, Group Interconnexion Acces
 Emilie Thiollet, Maintenance Engineer

14:00 **Visit to Regional Load Dispatch Center**

15:00 **Depart for Paris – *time approximate***

18:00 **Arrive in Paris & check into hotel – *time approximate***

Lodging: Le Méridien Etoile
81 Boulevard Gouvion Saint Cyr 75848 Cedex 17 Paris 75017
Tel: 33-1-40-68-3434

DAY 5: FRIDAY, MARCH 2, 2007

07:55 **Depart for AREVA**

AREVA
Speaker: Serge Jourden, Senior Area Manager, HVDC-Facts, Power Electronic Activities
(serge.jourden@areva-td.com)

Location: Areva Tower in La Defence (large black glass fronted building near the Total Tower)
Tour AREVA, Place de la Coupole, La Defence 92084 Paris

08:00 Welcoming & Introductions

08:05 Overview of AREVA's History & Experience with the IFA

08:25 Current Projects

08:45 Adjourn & Walk to RTE

Meeting with the Réseau de Transport d'Electricité (RTE)

Location: RTE – 1, terrasse Bellini, TSA 41000, 92919 La Defense Cedex (tel: 01-41-02-10-00)

Speakers: Philippe Adam, Executive Manager

Mr. Eric Mercandalli, Director of the Market Tools Department

RTE was created in 2000 as a subsidiary of EdF to act as an independent transmission system operator (TSO) and is charged with operating the French grid. Since 1st September 2005, RTE has been a state-owned limited company, a subsidiary of the EDF Group. It is responsible for the continuity and quality of the French power system and for providing equal access for all users to the power transmission network. All high and extra high voltage power lines, and transforming substations, in addition to all interconnector in France – including the IFA – are the assets of RTE and are the operational responsibility of RTE.

09:00 Welcoming Coffee & Tea

09:05 Overview of the RTE

- Organization, governance and enabling policies
- System supply, demand and transmission constraints
- Operational guidelines

09:30 Overview of the England-France Interconnector (IFA)

- History & sequence of activities leading up to the establishment of the connection
 - Overview of the France Electricity Market – history & development leading up to the cable
- Technical issues relating to the planning and designing of the link

10:30 Coffee & Tea Break

11:00 Overview of IFA Operations

- Access rules
- Overview of the auction mechanism for capacity

- Power purchase agreements with regard to tariff, quantum of power transferable, etc.
- Handling of transmission congestion

12:00 Lunch

Meeting with the Energy Regulatory Commission (CRE)

Location: 2, rue du Quatre Septembre, 75002

Contact: Raillon Philippe (Tel: 33-1-445-04153; philippe.raillon@cre.fr)

Speakers: Sophie Dourlens, Analyst, Cross-border power trade department, Grid Access Directorate
 Fabienne Amiard, Chargee de Mission, Cirection des Relations Internationales
 Philippe Raillon, Director International Affairs

The Energy Regulatory Commission (CRE) is an independent administrative authority responsible for regulating the energy markets (including natural gas) and in particular supervising access to the natural gas transmission and distribution networks. It lays down the operating rules for the market and has powers to control, audit and penalize the gas operators. Its role consists of settling disputes brought to its notice which mainly concern access to gas industry infrastructures, proposing tariffs for use of the networks which are then decided on by the ministers in charge of the economy and energy, and checking that there are no instances of discrimination, cross-subsidy or distortion of competition.

15:00 Overview of CRE

- Organization, governance and enabling policies

15:45 Overview of the Regulation of the England-France Interconnector (IFA)

16:30 Close of Day Five

SATURDAY, MARCH 3, 2007 – delegates return home

11:30 Depart for airport (delegates should already be checked out)

Flight information:

14:30 depart Paris Charles De Gaulle Intl Arpt for Dubai

23:59 arrive Dubai

Emirates Airlines (EK) – 74

Sunday, March 4, 2007

03:20 depart Dubai for Colombo

09:05 arrive Colombo

Emirates Airlines (EK) – 348