Fleet Wide Third Party Certification for NG

June 2012

Ruma Deb

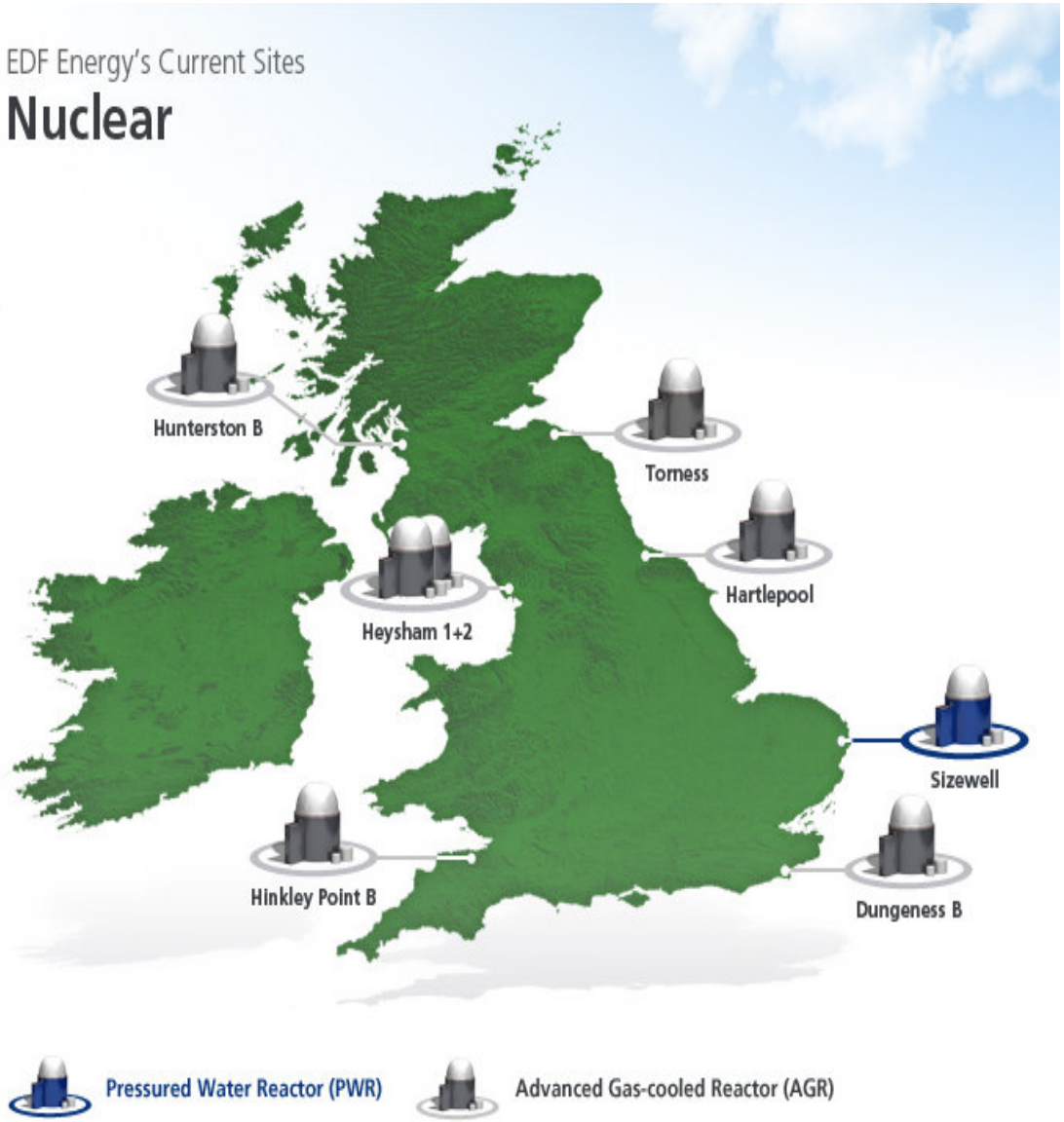
Agenda

- EDF Energy Nuclear Generation
  - Background
- Integrated Management System
  - A Brief History
- Fleet Wide Third Party Certification – Case Study
- Current Status & Way Forward

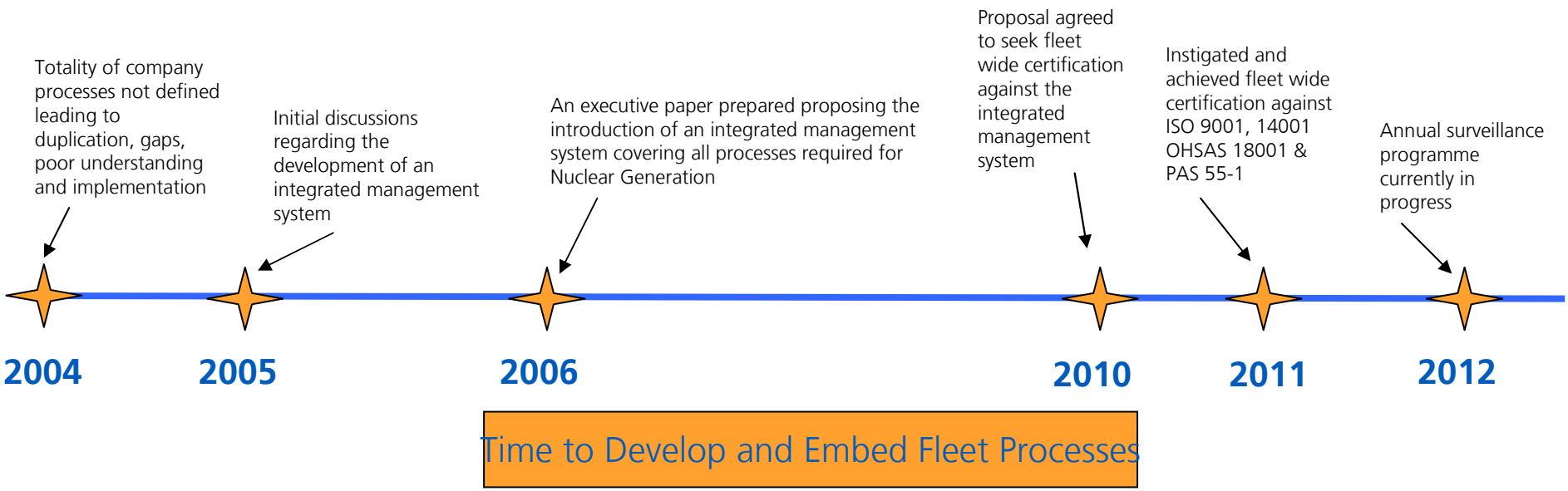
Background

EDF Energy Nuclear Generation

- EDF Energy is part of EDF Group, which also has nuclear operations in France and the United States. Each country has its own regulatory regimes and, consequently, specific nuclear policies have been developed in each country
- In the UK, we operate 8 nuclear power stations
- With a combined capacity of ~ 9,000 Megawatts



A Brief History



FWTPC Project : Objective

- To achieve certification of the EDF Energy Nuclear Generation Ltd (NGL) fleet integrated management system (IMS) against internationally recognised standards for:
  - Quality (IS0 9001:2008)
  - Environment (ISO 14001:2004)
  - Occupational Health and Safety (OHSAS 18001:2007)

FWTPC Project: Scope

- The FWTPC Project was applicable to the NGL IMS, implemented at the following locations:

Phase 1	Phase 2
• Barnwood (BWD) • East Kilbride (EKI) • Hunterston (HNB) • Heysham 1 (HYA) • Sizewell B (SZB)	• Hinkley Point B (HPB) • Hartlepool (HRA) • Torness (TOR) • Dungeness B (DNB) • Heysham 2 (HYB) • Turbine Support Group (TSG)

FWTPC Project: Why LRQA?

- Extensive nuclear industry experience and at the time of their selection was the only certification body with full accreditation by the UK Accreditation Services (UKAS) against ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.
- The scope of LRQA's accreditation includes Scope references EA 11 and EA 25, which relate to NGL activities involving nuclear fuel and electricity supply respectively.

FWTPC Project: What it means to NGL

- Helps to assure our internal and external stakeholders that we operate a centrally co-ordinated integrated management system based on international standards of good practice.
- Compliance enables us to credibly demonstrate that we are committed to the pursuit of an effective process led, integrated management system by:
  - achieving consistently high standards of performance
  - making more efficient use of our resources
  - enhancing learning across the fleet from assessment outputs

FWTPC Project: Timeline

- January 2010 - ENEX/044/09 Information Paper: "Proposal for Third Party Certification from a single certification body" produced
- February 2010 - InfoComm issued by Mark Gorry: "A fleet approach to third party certification"
- March 2010 - FWTPC Project Lead appointed by the Head of Quality
- April 2010 - FWTPC Corporate Project Team established
- May 2010 - Third party certification body, Lloyd's Register Quality Assurance (LRQA) appointed
- August 2010 - FWTPC Project Kick-off Meetings completed
- February 2011 - LRQA Gap Analysis completed
- March 2011 - Internal Integrated Audits completed
- July 2011 - LRQA Stage 2 Assessments completed
- July 2011 - Recommendations for certification of the NGL fleet approved by LRQA Technical Office
- August 2011 - Project end

FWTPC Project: Status Update – October 2011

		Key Milestones				
	Sites	Project Kick-off Meeting	Internal Integrated Audit	LRQA Gap Analysis / Stage 1 Assessment	LRQA Stage 2 Assessments	Recommendation for Certification Achieved
PHASE 1	Barnwood	Fleet Managers/Process Owners/Location Managers April/May 2010 COMPLETE	w/c 9th August 2010 COMPLETED	8th - 11th June 2010 COMPLETED	17th - 21st January 2011 COMPLETED	APPROVED
	East Kilbride		w/c 16th August 2010 COMPLETED	23rd - 26th August 2010 COMPLETED	10th - 13th January 2011 COMPLETED	APPROVED
	Hunterston	23rd March 2010 COMPLETED	w/c 26th April 2010 COMPLETED	N/A	5th - 9th July 2010 COMPLETED	APPROVED
	Heysham 1	24th March 2010 COMPLETED	2nd – 4th November 2010 COMPLETED	2nd - 3rd September 2010 COMPLETED	28th February - 3rd March 2011 COMPLETED	APPROVED
	Sizewell B	19th May 2010 COMPLETED	w/c 18th October 2010 COMPLETED	22nd - 25th November 2010 COMPLETED	14th - 18th March 2011 COMPLETED	APPROVED
PHASE 2	Heysham 2	20th July 2010 COMPLETED	6th - 9th September 2010 COMPLETED	13th - 16th December 2010 COMPLETED	18th – 21st July 2011 COMPLETED	APPROVED
	Hinkley Point B	3rd August 2010 CONFIRMED	w/c 11th October 2010 COMPLETED	2nd - 4th November 2010 COMPLETED	14th – 17th February 2011 COMPLETED	APPROVED
	Hartlepool	15th July 2010 COMPLETED	w/c 8th November 2010 COMPLETED	11th - 14th October 2010 COMPLETED	21st – 24th March 2011 COMPLETED	APPROVED
	Torness	21st June 2010 COMPLETED	22th - 24th March 2011 COMPLETED	7th – 9th February 2011 COMPLETED	3rd – 6th May 2011 COMPLETED	APPROVED
	Dungeness B	29th July 2010 CONFIRMED	w/c 24th January 2011 COMPLETED	15th – 18th November 2010 COMPLETED	11th – 15th July 2011 COMPLETED	APPROVED
	Turbine Support Group	20th July 2010 COMPLETED	13th – 17th September 2010 COMPLETED	21st – 22nd February 2011 COMPLETED	13th - 16th June 2011 COMPLETED	APPROVED

FWTPC Project: Statistics

Project Activities	Count
Kick-off Meetings	54
Project Information Booklets	470
Preparatory visits (prior to each LRQA assessment)	19
Preparatory visit Information Packs	38
LRQA assessments (Gap Analysis + Stage 2)	20 weeks
LRQA Assessors	15
Project miles travelled (by Project Lead and Project Manager)	20, 692 miles
Project days away from home (by Project Lead and Project Manager)	164 days
Curries eaten	320
Project completed	**14 months** (9 months ahead of schedule)

FWTPC Project: Lessons Learned

Communication, Communication, Communication!

- Early acknowledgement of stakeholders and their requirements
- Consistent communication at all levels, e.g. via email, through face-to-face meetings, information packs/ briefing notes
- Physical presence of the FWTPC Project Lead and Project Manager helped to demonstrate support
- Use of internal communication tools including, InfoComm, eNGage, intranet homepage
- Clear, succinct and timely reporting, e.g. 4 Box Report, SODT Report, NG exec team papers
- User friendly format of information, e.g. FWTPC Level 1 Schedule, meeting minutes
- Fortnightly and monthly project meetings with the Head of Quality, the Corporate Project Team and station Project Teams
- Strengthened relations between NGL departments, i.e. between Quality, ERO, ISB and Asset Management
- Strong partnership developed between LRQA, the FWTPC Project Lead and Project Manager
- Development and maintenance of the FWTPC intranet site with project management documentation, key milestone headlines and "read more" articles

FWTPC Project: Stakeholder Satisfaction

- FWTPC Project Performance Evaluation Forms issued to all Station Directors, the Head of Quality, the Head of Industrial Safety, the Environment Fleet Manager, the Head of TSG, the TSG Continuous Improvement Manager, the EKI Plant Engineering Manager, all TSSMs and all station QA Engineers for completion.

- 2 specific quantifiable questions were asked:
  1. How would you rate the delivery of the FWTPC Project overall? (8.2)
  2. How satisfied are you with the level of support you received from the Quality Department at Barnwood? (8.6)

  (Recipients were requested to score each question on a scale of 1 to 10 (1 = poor, 5 = average, 10 = excellent).

- 58% response level

- Based on this feedback it can be concluded that stakeholder satisfaction in relation to the delivery and support provided during the FWTPC Project was a success.

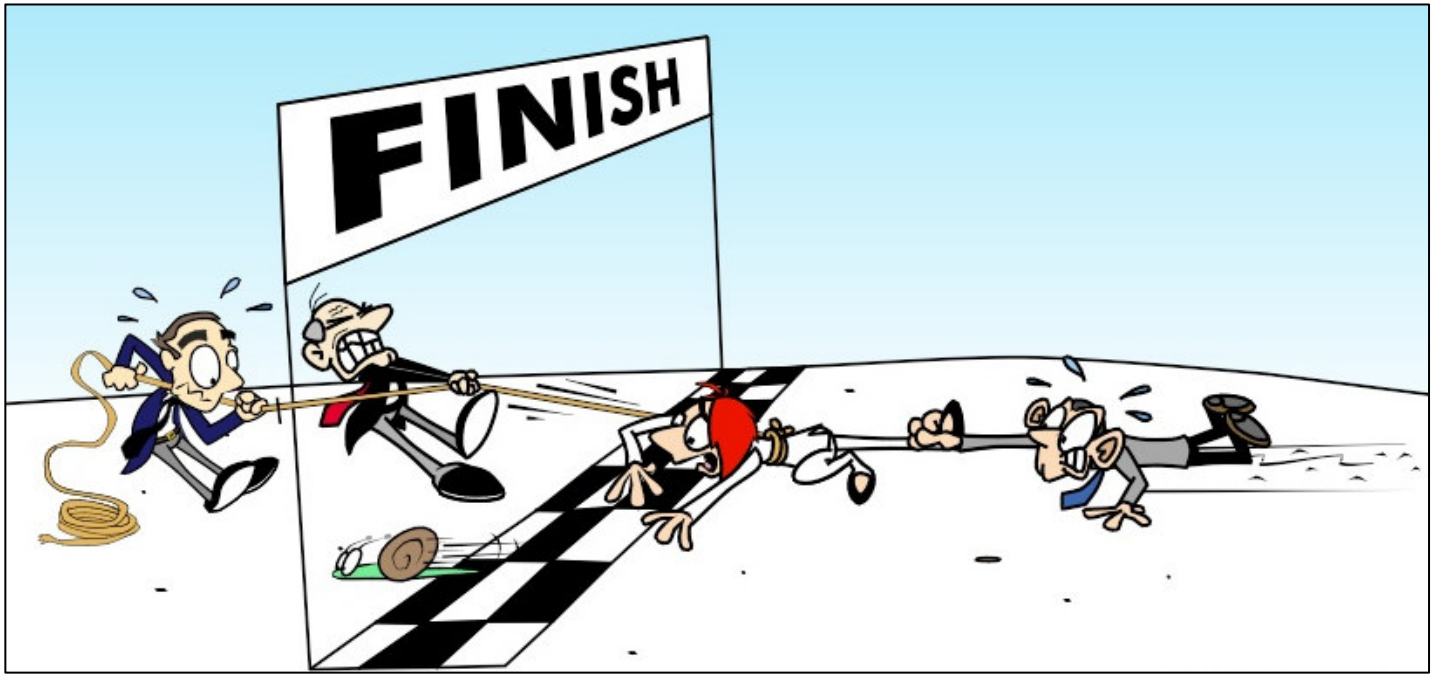
FWTPC Project: Conclusions (1/2)

- On 21st July 2011, NGL became one of the first nuclear generators in the world to achieve fleet-wide certification to ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 and the publicly available specification for Asset Management (PAS 55-1:2008). Certification was achieved through third party certification body LRQA.

- The achievement is testament to the robustness of the NGL approach to process management through an IMS, and marks the successful completion of the FWTPC Project that started with the recommendation for certification of Hunterston B on 9th July 2010, and concluded with Heysham 2 being recommended for certification on 21st July 2011.

- The FWTPC Project achieved its goal 9 months ahead of schedule and under budget.

FWTPC Project: THE END!!



FWTPC : THE BEGINNING….

FWTPC: Way Forward

- In order to improve performance and demonstrate our commitment to continual improvement, it is imperative that all NCs raised are addressed across the fleet in a timely manner and with appropriate rigour

- Future annual surveillance visits across the fleet will be far more challenging, adopting a 'deep and narrow' audit approach of our IMS (i.e. covering Quality, Environment, Occupational Health and Safety and Asset Management) and involving extensive 1-2 day audits of our high risk processes.

- For ongoing FWTPC, a number of recommendations have been made for consideration. These recommendations are directed towards strengthening the way we manage our processes to ensure ongoing FWTPC

- The ongoing maintenance of our certification supports the EDF Energy vision and contributes to our ambitions, by helping to drive integrated process management and continuing our quest for continual fleet-wide improvement

To Ensure Safe, Reliable and Sustainable Generation