

## Powering Improvement Corporate Memory

### **Energy Networks Association**

## Health and Safety in Electricity Networks 1999 to 2015

- 1. As we come to the end of the first phase of Powering Improvement it is useful to take stock and review our collective efforts over the past 15 years from 1999 when the first electricity industry strategy, SAFELEC 2000, was launched. This is a timely exercise because of the level of change at this moment in time. This includes:
  - New HSE CE
  - HSE chair expected to change next year
  - New Minister with responsibility for H&S
  - A number of experienced HSE Electrical Specialist Inspectors retiring
  - New SHE Committee chair
  - New ENA Head of Safety, Health & Environment
  - Nick Summers expected to move to a new HSE department in the first half of 2015
- 2. One of the overarching themes in the next phase of Powering Improvement is corporate memory and with a number of changes in personnel imminent it is important that collective H&S efforts over the past 15 years are recorded.
- 3. The paper summarises achievements and lessons learned to date and concludes with some challenges that the SHE Committee will need to consider going forward. These are intended to complement the priorities highlighted in the new SHEC work plan.
- 4. It is proposed that the paper be circulated to the ENA Board, National HESAC and the SHE Managers and posted on the PI website.
- 5. Members are invited to note the content, agree to the document being circulated and discuss the "priorities going forward" listed towards the end of the document and how the SHE Committee should best manage them.

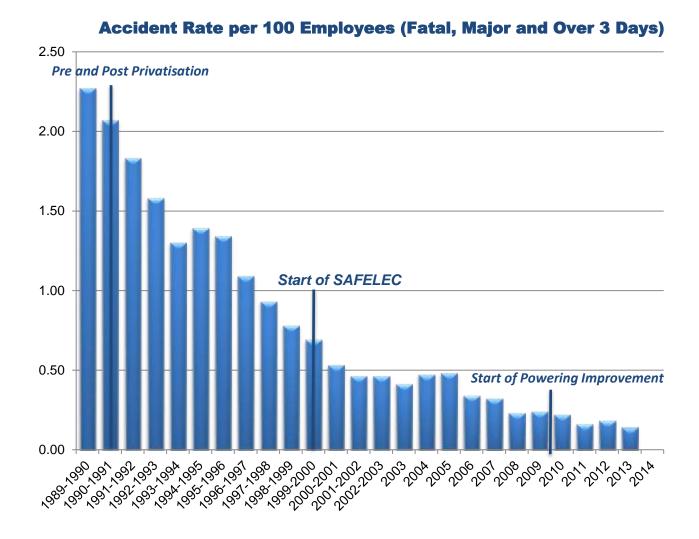
## Introduction/Background

This document reviews and summarises the collective H&S initiatives and strategies in the Electricity Industry from 1999 to the end of 2014 focussing on networks. From 1999 to 2003 the work was managed via the Electricity Association which was the trade body covering networks, generation and retail. In 2003 the Electricity Association ended with networks responsibilities being managed by Energy Networks Association (ENA), generation covered by the Association of Electricity Producers (AEP) and retail by the Energy Retail Association (ERA). In 2012 AEP and ERA merged to form Energy UK.





The industry is approximately 6 times safer since privatisation (notwithstanding a number of fatalities that have tragically occurred over this time) as can be seen from the following graph:



## **Major Committees**

#### National HESAC

National HESAC is a non-executive joint body comprising companies and trade unions of the Electricity Industry together with representatives from the HSE (and originally the Department of Trade and Industry). It was established to consider collective health, safety and operational environmental (where appropriate) matters of mutual interest. It has been meeting successfully for over 35 years. The committee functions as a positive and pro-active forum to help promote a positive climate for the management of health, safety and the environment within the whole Electricity Industry. The role of chairman is alternated each year between a senior Trade Union official and a senior company representative (currently Chair of ENA's SHE Committee).





The 100<sup>th</sup> meeting was held in 2007 and was attended by Sir Bill Callaghan who was Chair, Health & Safety Commission at the time.

<u>Chairs</u>: For trade unions – Terry Lane (EMA), Mike Clancy (Prospect), Mike Smallwood (Amicus), Steve Bloomfield (Unison), Kevin Coyne (Unite)

For companies: Alan Carey (Seeboard), Kevin Morton (EDF Energy), Peter McCormick (CE Electric UK), Doug Wilson (ScottishPower).

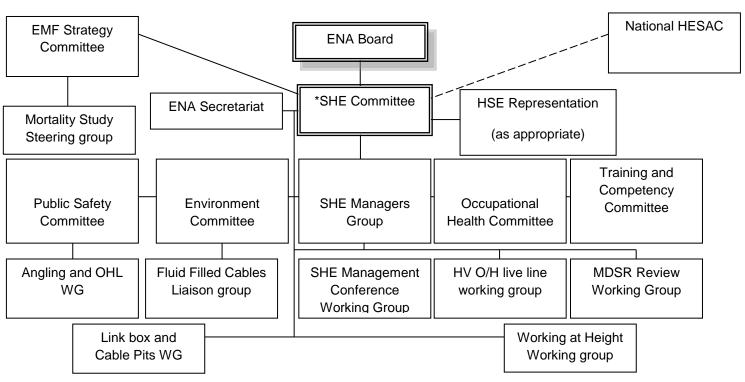
#### ENA SHE Committee

This Committee was formerly the Safety Management Coordinating Committee but was refreshed and renamed as the SHE Committee in 2003 when the ENA was formed.

The aim of the SHE Committee is:

- To provide high level leadership and strategic direction on safety, health and environment (SHE) issues for electricity networks;
- To actively assist ENA Member Companies in managing the SHE aspects of their legal duties and licence obligations;

ENA's collective SHE activities and outputs are managed through a framework of committees and task forces established by the SHE Committee. This work complements Companies' own activities and facilitates co-operation between Companies in safety, health and the environment.



## Framework of the Committees:





# List of chairs:

Colin Edge	Midlands Electricity	1999 – 2000
Tudor Townsend	Yorkshire Electricity	2000 – 2002
Alan Carey	SEEBOARD	2002 – 2005
Peter McCormick	CE Electric UK	2005 – 2011
Doug Wilson	ScottishPower	2011 - 2015

# List of guidance and standards produced:

# SHEC NOTES OF GUIDANCE

SHEC 001	The Properties & Control of Hazardous Substances
SHEC 002	Notification of Specified Events Regulation 34 Electricity Supply Regulations
SHEC 003	Assessment of Voltage Testing Devices
SHEC 004	Safe Working of Third Parties in Close Proximity to LV Overhead Lines
SHEC 005	Guide to Aids for Mechanical Handling
SHEC 006	Earthwire Replacement with One Circuit Live on 132kV Towers
SHEC 007	Insulated Tools & Equipment for LW Assessment Reports
SHEC 008	EI/British Waterways Joint Safety Guidelines
SHEC 009	HV Hot Glove Working
SHEC 009a	Justification of HV Rubber Glove Live Line working
SHEC 010	Model Distribution Safety Rules
SHEC 011	Review of the Collective Aspects of LV Working on Distribution Network
SHEC 012	Safe Working on Poles
SHEC 012/REV1	Notes of Guidance on Poles. Part I – General
SHEC 012/REV1	Notes of Guidance on Poles. Part II – Management of Fall Risks
SHEC 013	Minimisation of Health Risks during Jointing
SHEC 014	Work on Towers & Attachment





SHEC 015	Achieving "Best Practice" for Safe Working & the Application of Earths in Open B/B HV S/Ss	
SHEC 016	Clothing for Protection from Flames, Electric Arcs and Associated Effects	
SHEC 017	Safe Working at Height on Plant and Structures in Substations	
SHEC 018	Guidance on the Selection of Insulated Tools for Live Working	
SHEC 019	Electricity Industry Standards for Distribution Safety Rules	
SHEC 020	Standards of Basic Electrical Safety Competence	
SHEC 021	Demarcation in substations	
SHEC 022	Basic SHE Awareness	
SHEC Standards a	nd Position Papers	
Position Papers:		
SHE01	Demarcation in substations	
SHE02	Basic SHE awareness	
SHE03	Working at Height	
SHE04	Occupational Health & Wellbeing Framework	
SHE05	SHE Passport	
SHE06	Earthwire replacement	
SHE07	Application of earths in open busbar substations	
Standards:		
SHEC01	Live working on LV Networks	
SHEC02	Fire retardant clothing	
SHEC03	Basic SHE awareness	
SHEC04	G55/2 – live zone LV distance	
SHEC05	EQQC Reg 31 Guidance	
SHEC06	Post-trip reclosing of HV electrical distribution circuits	
SHEC07	Model Distribution Safety Rules	
SHEC08	HV OHL Live Working	





SHEC09 DNO responses to reports of low or grounded conductors

Guidance:

- Managing H&S through organisational change
- H&S Leadership

## Industry H&S Strategies

## SAFELEC 2000 (1999 to 2000)

In September 1999 the Electricity Association launched SAFELEC 2000, "the Joint Strategic Plan for Health and Safety in the Electricity Industry". This plan was the result of extensive consultation and discussion between the Electricity Association Member Companies, Trade Unions and HSE and was put together under the auspices of National HESAC. The background to the strategy was HSE's belief that the new companies comprising the industry since privatisation in 1990 were not yet mature enough to openly share H&S experiences - especially lessons learned from accidents and other incidents. The strategy, largely encouraged by HSE, was designed to improve this.

SAFELEC 2000 was a framework document which identified broad areas for co-operation between the management of Electricity Association Member Companies, the Trade Unions and HSE. It was one of the first documents of its type in the UK and placed the Electricity Association ahead of other industry sectors in its aim of improving the management of health and safety through joint action.

Aims:

- Work together to increase mutual understanding and awareness, and improve H&S standards;
- Improve communications;
- Raise the profile of H&S management and occupational health;
- Deal with change;
- Monitor new developments;

## SAFELEC 2010 (2000 to 2010)

In line with the Government's initiative to "revitalise" occupational health and safety by 2010, SAFELEC 2000 was renamed and relaunched as SAFELEC 2010 in 2000.

## REVITALISING HEALTH AND SAFETY AND SECURING HEALTH TOGETHER

In June 2000 the Government launched the major initiative Revitalising Health and Safety (RHS) which aimed to inject new impetus into the health and safety agenda. This was





largely a response to a very poor record in the construction sector. At its heart were a number of targets for Great Britain's health and safety system overall:

• To reduce the number of working days lost per 100,000 workers from work-related injury and ill health by 30% by 2010;

- To reduce the incidence of fatal and major injury accidents by 10% by 2010;
- To reduce the incidence rate of cases of work-related ill health by 20% by 2010;
- To achieve half the improvements under each target by 2004.

At the same time, The Department of Health, launched Securing Health Together (SHT), an occupational health strategy for Great Britain which represented a joint commitment by Government bodies concerned with occupational health, and other non-government bodies to work together to reach the following common goals:

- To reduce ill health both in workers and the public caused, or made worse by, work;
- To help people who have been ill, whether caused by work or not, to return to work;

• To improve work opportunities for people currently not in employment due to ill health or disability; and

• To use the work environment to help people maintain or improve their health.

By 2010 interested parties will work together to achieve the following targets:

- (a) a 20% reduction in the incidence of work-related ill health;
- (b) a 20% reduction in ill health to members of the public caused by work activity;
- (c) a 30% reduction in the number of work days lost due to work-related ill health;

## ELECTRICITY INDUSTRY RESPONSE

Discussions took place with Electricity Association Member Companies and within National HESAC throughout 2000 and 2001 to establish a process for agreeing collective Electricity Industry targets under SAFELEC 2010. As well as the RHS and SHT initiatives, these discussions took into account the HSE's Engineering and Utilities Sector Outline Plan and issues currently under consideration collectively in the Electricity Industry.

The Electricity Association Board agreed a process in April 2001 and a public commitment was made at the Health and Safety Management Conference in May 2001.

The approach agreed by the Electricity Association Board was as follows:

(a) The Electricity Industry should build on the start given by SAFELEC 2000;

(b) The Industry should fully commit to the general aims in RHS and SHT and the overall "headline" numeric targets;





(c) Individual Electricity Association Member Companies and their business units should make a contribution to the headline targets:

• Through individual Electricity Association Member Company initiatives aimed at Companyspecific issues and problems.

• Through collective initiatives aimed at Industry-wide issues and problems.

(d) The Electricity Industry has a health and safety record that is better than many other industries and it is realised that improvements are to be sought on an existing relatively good performance;

(e) Targets should be specific and relevant to the real issues faced by the Electricity Industry and lead to a real improvement in standards.

(f) Targets should be numeric where appropriate but pro-active non-numeric targets may be more appropriate to address specific issues;

(g) A sustainable process should be put in place for continuously reviewing the issues and targets identified and the progress being made by the Industry.

It is recognised that the target for reducing fatal and major injury accidents will be a challenge due to the current low incidence rate for the Industry. It is recognised that the target for reducing the incidence rate for cases of work-related ill health will also be a challenge because of the difficulties in defining "work-related".

Furthermore, as RHS sets targets for "working days lost" this necessitated that many Electricity Association Member Companies having to introduce new systems and processes to collect and collate such information. At the time HSE emphasised throughout the process that it was important not to focus solely on "figures". The overall objective was to raise standards of health and safety.

## INDUSTRY-WIDE COLLECTIVE SAFETY TARGETS RELATED TO SPECIFIC ISSUES

The Safety Management Co-ordinating Committee (Distribution/Transmission) (SMCC – later became the SHE Committee) and the Generation Safety Managers Group (GSMG) were the bodies entrusted by the Electricity Association Board to identify safety issues of collective interest to Electricity Association Member Companies.

The SMCC and GSMG developed a number of industry-wide collective targets related to specific safety issues relevant to the distribution and generation parts of the Industry. These included working at height and slips, trips and falls. The Trade Unions and HSE were involved in these discussions.

From the SAFELEC 2010 Second Progress Report (issued May 2003):

David Left – Head of HSE Utilities Sector Group





SAFELEC 2010 is a good example of what can be achieved when trade associations and their members, Trade Unions and HSE work together to improve health and safety.

I welcome the action that the electricity industry has taken under SAFELEC 2010 over the last year towards establishing baselines for numeric targets and producing national guidelines on specific issues but, of course, with such a long term initiative more will need to be done.

The main challenge is now at company level to translate a national action plan into specific initiatives that not only achieve the full commitment of management, employees and contractors but also produce tangible improvements in health and safety.

#### Moving forward Together (2006)

Following a poor year for accidents in 2004, National HESAC worked throughout 2005 to raise standards leading to the issue of *Moving Forward Together*. This statement of intent was launched in 2006 by Mike Clancy (Prospect Deputy General Secretary and TU-side chair of National HESAC) and Peter McCormick (SHE Committee chair and company-side chair National HESAC) to "refresh" SAFELEC 2010. This was a joint agreement between companies and trade unions.

Member Companies and the Industry's Trade Unions are committed to working together to improve health and safety standards. The SAFELEC 2010 initiative is a public example of this commitment. Its challenging targets are intended to improve not only the safety performance of the industry to 2010 but to embed a long- term improvement in safety behaviour. Five years into the 10 year SAFELEC 2010 programme, the disappointing figures for 2004 indicate that there is a need to "revitalise" the initiative to ensure that efforts in the years up to 2010 result in the agreed numeric targets being met. We have to turn commitment into achievement.

Moving Forward Together focused on:

- Commitment/leadership from the top
- Challenge of unsafe acts and conditions
- Good communications
- Developing and leading proactive measures to improve

## Fatalities in 2007

This year was the worst in the industry for over 10 years. There were a total of 11 fatalities – 5 to employees in networks companies and 6 to contractors in generation.

The 5 network fatalities were due to:

- fall from height (tower scaffold)
- Tap Changer catastrophic failure





- 3 contacts with electricity
  - 1 jointing live LV
  - 1 pole mounted transformer change
  - 1 open compound substation

The generation fatalities were due to:

- 3 falls from height
- 1 fall into water tank
- 1 dragged into machinery
- 1 excavator strike

With regard to networks, these fatalities and a number of other incidents, suggested that highly-trained experienced workers in the electricity networks sector appeared to be taking risks whilst working with live electricity that were both unnecessary and unjustified. In light of this, ENA's SHE Committee, took the decision to commission independent research to gain a greater understanding of the underlying behavioural and safety culture within the electricity networks sector. The Health & Safety Laboratory (HSL) were selected as the best agent to conduct the research based on similar work undertaken in other high-hazard industries. To progress the work the SHE Committee established a steering group to oversee the study under the direction of Sir Bill Callaghan who was able to inject an independent impartial voice into the debate as well as providing the benefits of his many year's experience chairing the Health and Safety Commission. The trade unions were kept advised of the process and intentions of the work via National HESAC.

Two companies were directly involved as representatives of the industry namely National Grid and United Utilities (now Electricity North West). The study involved a number of structured focus groups and one-to-one interviews that targeted areas that had been identified by the SHE Committee as being particularly relevant:

- Understanding the hazards
- Competence and training
- Roles and responsibilities
- Procedures
- Supervision
- Resources
- Management commitment/visibility





In addition, during the initial focus groups and interviews, the use of contractors also emerged as a theme and was included as a topic for subsequent groups.

The focus groups and interviews contained both front-line workers (fitters, jointers, linesmen and safety representatives) and senior managers (including Health & Safety Managers, Operations Managers and Training Managers).

## Findings

The results of the study reported the perceptions, opinions and understandings of the individuals and groups that were interviewed. There were occasions where these views did not follow the views of the organisations being studied. This identified a need to provide clarity and improve communications.

The areas for consideration that arose from the main findings can be summarised as follows:

#### Roles and responsibilities

• A number of interviewees advised that they were sometimes unclear who was responsible for safety on site. This emphasises the need for everyone to understand their responsibilities. These must be clearly defined and communicated.

#### Competence and training

- On occasion there may be a need to train experienced people on new equipment or unfamiliar activities. Systems should be in place to facilitate this.
- Systems must ensure that people do not work beyond their competency and authority. This is particularly important for apprentices and new recruits.
- Companies should have systems in place to ensure that monitoring of operational training and operational refresher training is completed. Frequencies for both these activities should be defined and justified.
- Procedures should make allowances for persons who are newly authorised to operate on or near the distribution systems. This could include increased monitoring or supervision for a defined period.
- Persons with supervisory responsibilities as part of their role should spend an appropriate amount of time on site.
- All training provided to operational staff should be practical and interactive. Employers should ensure that the type of training provided is appropriate and that the right balance of face-to-face training, computer-based training and written briefing materials are used.
- Companies should consider the need for both theoretical and practical content in operational refresher training courses.





## **Procedures**

- Combine safety documentation, where appropriate, in order to decrease volume and duplication and ensure that significant hazards are highlighted.
- Involve experienced workers as much as possible in drawing up procedures to ensure that they are based on how the task is actually performed and that they encourage ownership; this may be done by actively seeking feedback from staff on procedures and encouraging them to suggest improvements.
- Communicate the value of safety over performance and remove any incentives, regulatory or otherwise, that could encourage people to violate safety procedures to enhance productivity.

## Resources

- Employers should ensure that they have valid craft and operational competency registers in place for staff and that these registers are used when allocating resources to activities.
- Ensure that staff have the necessary resources to carry out their work safely; promoting an active discussion with employees can help identify the practical improvements that could be made.

## Senior Management

- Senior management visits to site need a consistent approach.
- Site visits should be designed to be informal and enable a two-way communication rather than be an audit visit.

## Technical health and safety communication

- Ensure that support to stop work on safety grounds is consistent throughout the management structure, including senior management.
- The focus of accident investigations should be on organisational learning rather than apportioning individual blame.

## **Contractors**

• Set the same standards for contractors as required for internal people and ensure through contractor engagement and leadership processes that these standards are met.

The research findings informed ENA member companies' response to the new HSE strategy that was issued in 2009 as well as feeding into discussions on the industry's priorities for the next decade once the current SAFELEC 2010 initiative ended.

The end of SAFELEC 2010





From Final SAFELEC 2010 Progress Report (issued July 2010)

Peter McCormick, Director of Group Health Safety & Environment, CE Electric UK Chair, ENA Safety Health & Environment Committee, Chair, Company-side National HESAC

SAFELEC 2010 was an ambitious 10 year programme and a great example of employers (in this case ENA and AEP Member Companies), Trade Unions and HSE, working together with a common goal to raise health and safety standards.

At the heart of SAFELEC 2010 were a series of high-level numeric targets to reduce accidents and cases of ill-health in line with the targets set by Government in the Revitalising Health and Safety and Securing Health Together initiatives.

A number of targets, in particular the high-level safety ones, have been met – even exceeded. But in a number of other areas, such as workplace stress, the targets have not been met. We will be building on all the lessons learned from SAFELEC 2010 in the industry's current 5 year strategy Powering Improvement.

Powering Improvement supports the HSE strategy The Health and Safety of Great Britain: Be part of the solution and again has the full support of ENA and AEP companies, Trade Unions and HSE. The programme focuses on 3 over-arching themes throughout the 5 year period: leadership, competence and worker involvement and addresses the new challenges for our sector over the next few years. I am confident that working closely with our Trade Union and HSE colleagues we will successfully meet these challenges.

## Mike Clancy, General Secretary, Prospect

SAFELEC 2010 represented an ambitious programme to deliver stretching improvements across a range of safety and occupational health targets. The scale of achievement is a testament to the commitment of staff, companies and trade unions to ensuring the highest standards are maintained. This has been strongly supported by HSE and other stakeholders. It has also provided a focus to the work of National HESAC which in recent years has sought to drive forward on major themes of concern across the Industry.

However, there are lessons to be learned that must inform the Powering Improvement initiative that replaces SAFELEC. There have been notable and consistent contributions from several companies to SAFELEC, which is particularly evident when reading the narrative on SAFELEC related initiatives. It is to be hoped that all companies in the industry will be contributing to Powering Improvement so the evidence we have is both broad and deep.At times the trade unions raised concerns about the visibility of SAFELEC in the workplace and company level safety committees. It is vital for Powering Improvement to be on the agenda across the Industry to ensure we have the engagement to make it a success.

Despite the targets having been met on several indices, the evidence arising from the HSL study reminds us that we have to still work to ensure the fundamentals are in place to maintain standards. We also must not ignore the negative trend on workplace stress as the pace of change will not lessen.





SAFELEC illustrates our success at delivering in a complex and potentially hazardous environment, but at a time when the Industry is set to replace an ageing workforce, rebuild networks and bring on new generation assets the challenge is to ensure new staff achieve the same high standards of competence and commitment to safety. The trade unions are ready to play their part in making this happen.

#### Lessons from SAFELEC 2010

The headline safety targets were met together with the specific industry targets for reducing falls from height, slips and trips and falls etc. However, the occupational ill health targets were not met.

There were challenges in collating data in the format required by Government – in effect data could not be collected for the first two years of SAFELEC 2010 because of the need for companies to introduce new systems.

There were difficulties in collecting contractor safety data consistently and it was not possible to collate contractor ill health data.

With regard to ill health data there were many discussions attempting to define "work-related". In the end total ill health data were collected (i.e. whether work-related or not).

Progress was largely measured by looking backwards (i.e. based on reactive accident data).

Ten years is too long to maintain the momentum for such an ambitious initiative. It was thanks to the efforts of National HESAC together with the ENA SHE Team that it was completed.

Industry changes throughout the decade increased the challenges in completing the strategy – not least the break-up of the Electricity Association in 2003.

#### Powering Improvement (2010 to 2015)

The final SAFELEC figures indicated that as an industry we appeared to be managing safety risks adequately. The safety improvements to date had been achieved largely through engineering and organisational controls. Further improvements will primarily be delivered via a focus on human factors i.e. influencing behaviour by addressing issues such as competence (skills/training/knowledge) and supervision.

The SAFELEC 2010 results indicated that reducing work-related ill-health remained a major challenge for the industry going forward and a focus on occupational health issues therefore remained a high priority throughout the new strategy.

Powering Improvement was the next five-year strategy of ENA and Energy UK member companies together with the trade unions and the support of HSE to aiming to bring about continuous improvement in safety and occupational health in the energy generation and networks sectors.





To maintain momentum throughout the five years, each year the strategy focused on a specific theme which was identified as a priority area for our sector. Each theme was led by a senior champion.

- 2010 Leadership (Champions David Smith, CE ENA and David Porter. CE AEP)
- **2011** Occupational health/wellbeing (Champions Jane Willis, Director of Cross-Cutting Interventions, HSE and John Crackett, MD Central Networks)
- 2012 Asset management/ maintenance (Champion Robert Davis, Group CEO EA Technology)
- **2013** Behavioural safety/personal responsibility (Champions Frank Mitchell, CEO ScottishPower Energy Networks and Mike Clancy, General Secretary, Prospect)
- **2014** Leadership and developing new strategy (Champion Steve Johnson, CEO Electricity North West)

A further important factor that helped to shape Powering Improvement was the HSE strategy *The Health and Safety of Great Britain: Be part of the solution* which was launched in 2009:

- Investigations and securing justice
- Encourage strong leadership
- Build competence
- Involve workforce
- Target key health issues
- Avoid catastrophe
- Take a wider perspective

Powering Improvement was intended to contribute to the delivery of the HSE strategy. In addition, in line with HSE's strategy, three over-arching themes ran throughout the duration of Powering Improvement:

- Leadership
- Improving competence
- Worker involvement).

ENA and Energy UK Member Companies together with the industry's four recognised trade unions, namely GMB, Prospect, Unison and Unite, with the support of HSE, committed to work together to achieve the vision that the UK electricity industry will be a world leader in health and safety performance by 2015.

To achieve this vision:

- We are committed to sharing best practice regarding the management of health and safety risks. This includes sharing lessons learned when things go wrong.
- We are fully committed to addressing occupational health issues as well as safety ones.
- Management will work closely with workers' representatives to ensure that all health and safety risks are adequately addressed.





• Everyone in our industry from senior management to operational staff has a responsibility to look after their own – and their colleagues' – health and safety

Vision:

# The UK Electricity Industry will be a world leader in health and safety performance by 2020

## Brendan Barber, General Secretary, TUC, 12th July 2010:

I am writing in order to welcome the Powering Improvement strategy and to offer the full support of the TUC in achieving its objectives.

As you would expect, the TUC encourages close cooperation between trade unions, employers and other stakeholders to achieve the highest standards of safety. The Electricity Industry's SAFELEC 2010 programme was correctly seen as a model of engagement and we believe Powering Improvement continues that commitment.

I note that the central aim of Powering Improvement is for the ESI to be a world leader in health and safety by 2015. Although this is ambitious I am sure that with the support of Industry's trade unions it is achievable. You can be assured that the TUC will promote Powering Improvement and I look forward to seeing how it progresses.

Throughout the first phase of Powering Improvement ENA have met frequently with senior HSE personnel to discuss progress:

- Geoffrey Podger, Chief Executive
- Judith Hackitt Chair
- Jane Willis, Director Cross-Cutting Interventions
- Kevin Myers, Acting Chief Executive.

Doug Wilson, Peter McCormick, Kevin Coyne and Mike Clancy met Mike Penning, Minister with responsibility for H&S in February 2014 to highlight successes.

Throughout Powering Improvement, the ENA SHE Team have worked closely with Mike Clancy, General Secretary Prospect, Kevin Coyne, National Officer – Energy & Utilities Sector, Unite the Union and Dan Shears, National Health, Safety and Environment Policy Officer, GMB.

## 2010 theme - Leadership

Throughout the 5 year strategy, in support of the leadership theme:

- Management will be visible through regular visits to sites. Such visits will be designed to be informal and encourage two-way communication ;
- Managers will seek to develop an understanding of the realities of a particular task i.e. any potential conflict between health and safety and operational considerations;





- Managers will be actively involved in investigations of accidents and incidences of ill health;
- There will be clear communication at all levels regarding management commitment to health and safety;
- The roles and responsibilities of senior management will be clearly defined with regard to health and safety;
- Health and safety considerations will be integrated into all management decisions;
- Managers will foster an effective health and safety culture which encourages open reporting of near misses in addition to accidents and incidents.

In support of the strategy, ENA's SHE Committee produced general guidance on the principles of good "safety leadership".

## 2011 theme - Occupational Health & Wellbeing

ENA and Energy UK Companies signed on to 6 commitments:

- 1. To discuss and clarify at board level the commitment to successfully manage occupational health risks
- 2. To identify the top three health risks and ensure they are being effectively addressed.
- 3. To ensure that health surveillance & fitness for work assessments are being delivered to national & legislative standards.
- 4. To review approaches to the management of stress and identify opportunities for improvement.
- 5. To develop policies for the rehabilitation of individuals back into the workplace and consider a fast-track physiotherapy approach to the management of MSDs
- 6. To raise awareness of the importance of workforce involvement, specifically health & safety representatives and other workers' representatives, in the management of Occupational Health and support them in carrying out health related activities to support the delivery plan throughout the year.

A number of successful workshops were organised that were attended by senior HSE representatives. A high level Occupational Health & Wellbeing Framework was produced. ENA issued this as a SHE Committee Position Paper.

#### 2012 Theme - Asset Management and Maintenance

The work for this year was overseen by a steering group that included representatives from HSE and the trade unions.

Successful workshops, using lessons from the Chelmsford tap changer fatality, were held at UK Power Networks and Northern Powergrid.

Dates are currently being finalised for workshops to be held in remaining ENA companies up to the end of second quarter 2015.

An asset management competence framework was issued.





High level guidance linking asset management, process safety and occupational health and safety was issued. (This was co-written with HSE).

A special edition of the SHE Review was issued detailing lessons learned from incidents over the past 20 years or so. This is now in its 3<sup>rd</sup> printing.

# 2013 theme – Human & Organisational Factors: Behavioural Safety and Personal Responsibility

The fourth year of *Powering Improvement* focused on *Human & Organisational Factors: Behavioural Safety and Personal Responsibility* although work in support of the previous years' themes of leadership, occupational health & wellbeing and asset management & maintenance also continued apace.

The year was championed by Mike Clancy, General Secretary of the trade union Prospect and Frank Mitchell, CEO ScottishPower Energy Networks.

To help focus efforts during the year, HSE's definition of Human Factors was used: *the environmental, organisational and job factors, and human and individual characteristics, which influence behaviour at work in a way which can affect health and safety.* This definition includes three interrelated aspects that must be considered: the job, the individual and the organisation.

## 2013 Delivery Plan:

## Outcomes

- By the end of 2013 workers in the electricity industry (from senior managers to front line employees) will be more aware of how their behaviour can impact on the health and safety performance of their company.
- By the end of 2013 companies and trade unions will have worked together to ensure that employees are comfortable and supported in challenging unsafe acts and conditions.

#### Outputs

- Review and document the range of behavioural safety initiatives and programmes that have been undertaken by electricity companies to date.
- Identify and collate national and international best practice from high-hazard industries.
- Produce high level principles and guidance for the electricity sector that reflect current best practice.
- Publish 6 case studies on the Powering Improvement website
- Produce a special edition of the ENA SHE Review.
- Hold national workshops.





Outputs from the 2013 Delivery Plan were as follows:

• Review and document the range of behavioural safety initiatives and programmes that have been undertaken by electricity companies to date.

This was completed and was used as the basis for a special edition of the SHE Review.

• Produce high level principles and guidance for the electricity sector that reflect current best practice

This was completed and is available on the Powering Improvement website.

A number of successful workshops were held and 8 case studies were produced.

## Frank Mitchell, CEO , ScottishPower, Energy Networks

The theme for this year was always going to be a difficult one and it is a sign of the trust that we have built up between companies and trade unions that we could publically commit to such a topic. I am pleased to note the guidance and case studies produced (including one from my own company) and would recommend that you have a look at them on the Powering Improvement website.

Tragically, there were two fatalities to ENA member company employees last year. This makes it all the more important that we continue to work together to make sure that we all – senior management, H&S practitioners, operational staff and trade unions – remain focused and always look out for one another. As the name of ScottishPower's current safety initiative states – Behaviour Matters.

#### 2014 theme - consolidation and leadership

The theme of leadership was revisited this year. Steve Johnson, CE Electricity North West agreed to be champion and wrote to all ENA Board Members highlighting the plans for the year.

ENA Member Companies shared details of recent "leadership" initiatives they have introduced to promote best practice for inclusion as case studies in the next SHE Review.

The champion for the year, Steve Johnson spoke at an event in Parliament on 9<sup>th</sup> July 2014 to recognise the dedication and efforts of those who worked over the winter to restore electricity supplies. This was attended by Mike Penning, Minster with responsibility for Health and Safety.

A leadership workshop was held at ENA offices chaired by Doug Wilson, Chair of the ENA SHE Committee. Over 40 delegates attended from ENA and EUK companies,





HSE, trade unions, BSC and other industry sectors. Presentations were given from UKPN, National Grid, Air Traffic Control, Centrica, Prospect and Aston Martin.

### **Review of the first phase of Powering Improvement**

A thorough review of the first phase of Powering Improvement will be undertaken but initial thoughts are:

#### Good:

- Positive Relationships between ENA, Energy UK, Trade Unions, HSE openness and willingness to share experiences (good and bad);
- The overarching themes and annual focus areas were relevant;
- Website and Publications were useful and valued;
- The role of champions successful;
- The overall accident rate has reduced since the strategy started;

#### To be improved:

- Engagement with contractors;
- Communication especially to workers at the front line;
- Clarity between company strategies and the industry strategy (Powering Improvement);
- Developing robust industry leading indicators;

A major success was that because of Powering Improvement, HSE now regard the electricity industry as "lower risk":

#### HSE Electricity sector strategy 2012-15

- The electricity sector, in terms of overall current health and performance, is considered to be a lower risk sector. The sector comprises of a number of mature and well placed intermediaries. Many of these players already have established mechanisms for delivery improvements, such as the electricity network and generation industry *Powering Improvement* initiative.
- HSE will support industry in delivering the aims of this strategy through joint working with stakeholders. Whereas general proactive inspection is not justified in this sector, reactive HSE investigation and enforcement will remain. Through the life of the strategy there may be specific exceptions where proactive inspections may be identified as necessary.

## Working with ISSA

The vision for the first phase of Powering Improvement was that "The UK Electricity Industry will be a world leader in health and safety performance by 2015". In support of this, the ENA SHE Team is continuing to work with organisations such as the electricity section of ISSA (International Social Security Association) to provide this





international perspective and to allow benchmarking. ENA are supporting work to produce *Guidance for Managers in the Management of Health and Safety Performance.* 

Peter McCormick has been elected vice-president of the ISSA Electricity Section. This will give ENA access to international best practice and a platform for highlighting ENA SHE activities.

## ENA – ISSA Joint workshops

#### London 2009:

This workshop was a joint event organised by ENA and the Electricity Section of ISSA and held on 21<sup>st</sup> May 2009 at the Institute of Civil Engineers. Speakers included Phoebe Smith (HSL) and John Steed (HSE) as well as international ISSA speakers.

#### Linowsee 2011:

This follow up workshop was held 27<sup>th</sup> to 29<sup>th</sup> March 2012 in Linowsee near Berlin chaired by Peter McCormick. The vision of Powering Improvement is that the UK Electricity Industry will be a world leader in health and safety and it is therefore important to benchmark performance against companies based outside the UK.

## Workshop Objectives

To support the UK Electricity Industry's vision, as stated in Powering Improvement (PI), to be a world leader in H&S by 2015 this workshop is an opportunity to benchmark performance outside the UK and share best practice in managing H&S risks particularly with reference to the 2012 and 2013 PI focus on asset management and behavioural safety respectively and also the overall themes of leadership, competence and worker involvement.

Delegates will comprise representatives from ENA, Energy UK, trade unions and HSE.

Outcomes from the workshop will inform the work to support PI up to 2015.

The workshop largely focused on asset management issues and there were presentations from the trade unions and companies such as E.ON and Airbus. Looking forward to the 2013 theme there was also a presentation on Human Factors from a speaker from the German Institute for Work and Health.

## London 2012:

## Workshop Objectives

To build on the partnership working established with ISSA and the successful joint training event held at the Training Centre in Linowsee, Germany in March 2012.





The event was chaired by Doug Wilson with 23 delegates attending. Speakers included John Steed (HSE), Sarah Page (Prospect), Dominque Vacher (EDF) and Neal Stone (British Safety Council).

### Powering Improvement Strategy 2015 to 2020

The next phase of the strategy is currently being finalised but the overarching themes and annual focus areas have been agreed:

#### **Overarching themes**

*Leadership* – at all levels;

*Worker Involvement* – we will continue to promote effective consultation, engagement and ownership;

Building Competence - workers will be able, aware and empowered;

*Corporate memory/Knowledge Bank* – we will work together to ensure that, as experienced workers retire and are replaced, lessons are remembered from incidents and accidents and mistakes are not repeated;

#### Annual Focus Areas

2015:	Working with contractors	
2016:	Managing occupational ill health risks	
2017:	Asset Management	
2018:	Human & Organisational Factors	
2019:	Consolidation. Developing PI3.	

The Delivery Plan for 2015 is currently being finalised:

This year will not focus on "management of contractors' but rather working together in an open partnership approach to learn from each other's approaches.

- Working together to share best practice, intelligence sharing and lessons learned;
- Reviewing and sharing approaches to managing common risks including safe working at height, working with electricity and occupational ill health risks;
- Improving communications better feedback from incidents and near misses;

By the end of 2015:

 Companies, contractors and trade unions together will have openly shared approaches to managing H&S risks to improve H&S performance in the Electricity Sector;





- Consistent approaches to managing the same H&S risks will be shared and promoted across the Electricity Sector by companies and contractors;
- Robust and timely communication systems will be in place to share lessons learned from incidents across the Electricity Sector;

## Public Safety

As a result of the Hampton recommendations the public safety role of the DTI Engineering Inspectorate moved to HSE on 2nd October 2006. Joint work with DTI started in earlier in 2006 to develop an Electricity Industry Public Safety Strategy (this was further developed with HSE once responsibilities passed to them). The first version of the strategy was issued in 2007 and it has been reviewed and updated on annual basis since then.

#### From the 2014 version:

HSE and ENA Member Companies will work together in partnership with the aim to reduce the number of incidents, in particular fatalities and injuries, caused to members of the public coming into contact with the electricity transmission and distribution network.

An analysis of the fatal, injurious and near miss incidents involving the public over the past 17 years indicate that the priority areas we need to focus on are:

- accidental contact with Overhead Lines (OHLs); For example incidents involving tippers and hiabs, ladders, poles and other long objects, tree climbing and cutting and incidents on agricultural and forestry land;
- wilful interference (e.g. vandalism and in particular metal theft);
- damage to underground cables including services to domestic properties;
- asset failures such as those involving link box faults;
- fires involving apparatus on consumers' premises;

## Metal Theft

To address the growing problem of metal theft, the ENA SHE Committee organised an initial workshop for ENA companies and HSE to discuss the issue in March 2011. The event was chaired by Doug Wilson. The outcomes were:

- Lobbying for legislative change was the most important strand of the industry's collaborative work on this issue.
- Important to maintain a coordinated national strategy within the industry.
- Complementing this will be consideration by individual companies of what they might do locally to address the issue.
- Need to use the industry's full political resources effectively.





• Continue to work to improve and effectively utilise intelligence that is being gathered.

Based on the success of the initial workshop a further one was held in November 2011 also chaired by Doug Wilson. This time in addition to ENA members and HSE, there were representatives from DECC, the police, Network Rail and BT.

The workshop is now an annual event and has been held at the ENA offices on 11 September 2012, 10 December 2013 and 3 December 2014.

#### **SHE Management Conferences**

The first Electricity Supply Industry Safety Conference was held on 2<sup>nd</sup> to 4<sup>th</sup> April 1990 at the Garden House Hotel in Cambridge hosted by Eastern Electricity. It was opened by Tony Baldry MP, Parliamentary Under Secretary of State for Energy and chaired by Mr J Wilson, Chairman of London Electricity.

The conference was renamed the Safety Management Conference when John Rimmington, Director General, HSE, was the keynote speaker in 1995 when Scottish Hydro-Electric hosted the conference in Aviemore. The "biggest conference yet" attracted nearly 200 delegates to Bournemouth in 1996 when Southern Electric hosted. The numbers were even higher the following year when over 200 delegates attended the conference in Gleneagles hosted by Scottish Nuclear.

The event first featured "health" in the title in 1998 when Northern Ireland Electricity hosted the "Health and Safety Management Conference" in Belfast. Speakers included the current chair of the Health & Safety Commission and the EMA General Secretary. The final conference of the 90s was held at The Belfry hosted by National Power.

In the conferences since then there have been speakers from the regulators, HSE of course but also the Environment Agency and Ofgem as well as ministers (Terry Rooney MP in 2008). There have been presentations from barristers (such as Anthony Scivener QC in 2003), academics, trade unions as well as speakers from Europe, New Zealand and beyond.

A full list of conferences is provided below:

Year	Sponsoring Company	Conference Venue
1990	Eastern Electricity	Garden House Hotel, Cambridge
1991	Yorkshire Electricity	Cedar Court Hotel, Wakefield
1992	Seeboard	Grand Hotel, Eastbourne
1993	Powergen	The Moat House International Hotel,
		Stratford-upon-Avon
1994	National Grid Company	The Moat House International Hotel,
		Harrogate
1995	Scottish Hydro-Electric	The Coylumbridge Resort Hotel, Aviemore
1996	Southern Electric	The Swallow Highcliff Hotel, Bournemouth
1997	Scottish Nuclear	Gleneagles
1998	Northern Ireland Electricity	The Culloden Hotel, Holywood, County Down
1999	National Power	The Belfry
2000	TXU Europe	Holiday Inn, London – Nelson Dock
2001	Northern Electric	Newcastle Marriott Hotel, Gosforth Park





2002	SEEBOARD	The Grand Hotel, Brighton
2003	United Utilities	The Crowne Plaza Hotel, Liverpool
2004	ScottishPower	The Radisson Hotel, Glasgow
2005	Central Networks	The ICC, Birmingham
2006	National Grid	Cumberland Hotel, London
2007	Guernsey Electricity	Guernsey
2008	CE Electric UK	Oulton Hall, Leeds
2009	WPD	Bath
2010	SSE	Wokefield Park, Reading
2011	E.On	The Belfry, West Midlands
2012	UK Power Networks	Tower Guoman, London
2013	Electricity North West	Hilton Deansgate
2014	ScottishPower	Glasgow Hilton

## SHE Receptions

As the then chair of the ENA SHE Committee, Peter McCormick proposed that ENA host an annual SHE event to encourage networking amongst ENA companies and stakeholders such as Energy UK, HSE, trade unions, RoSPA, British Safety Council etc. Eight such events have been successfully held since 2006.

- 2006 Arts Club, Dover Street
- 2007 Arts Club, Dover Street
- 2008 Cheneygates, Westminster Abbey
- 2009 Cheneygates, Westminster Abbey
- 2010 Cheneygates, Westminster Abbey
- 2011 Earl of Euston Rooms, 86 St James
- 2012 River Room, Whitehall Place
- 2013 Royal College of Surgeons

Speakers included: Frank Mitchell, Mike Clancy, Robert Davis, Doug Wilson, Peter McCormick and Jane Willis.

## Priorities going forward

Consolidate and preserve the relationships with key stakeholders - e.g. HSE, Union Leaders, Politicians and H&S leaders within member companies;

Lobby and influence, at a strategic level, to help shape future direction of H&S legislation within the UK;

Foster and develop new relationships to further enhance the industry H&S footprint and influence others e.g. ISSA, contractors, IOSH, British Safety Council, Renewable sector, other relevant safety critical industry sectors;

Support and maintain appropriate key representation on National HESAC;

Maintain and preserve HSE 'low risk' sector rating by delivering top quartile performance and demonstrating industry leadership appetite and ambition;





Build new relationships with key HSE technical staff (Principal Electrical inspectors etc) to help maintain enforcement consistency and promote understanding of industry standards, agreements and challenges;

ENA should continue to inform and support member companies regarding impending legislative changes and potential operational implications;

ENA should continue to facilitate support for individual member companies when dealing with significant accidents or incidents;

Promote and share H&S best practice across all sectors of our industry - distribution, transmission, generation, renewables, retail etc;

Record, maintain, share and develop key corporate knowledge regarding industry accidents and incidents;

Monitor and react to enforcing agency changes and direction - Turnbull report recommendations, potential commercialisation of HSE and HSL;

Maintain strategic awareness and visibility of industry H&S agenda at ENA Board level;

Deliver the objectives of the next phase of Powering Improvement with the same rigour and alignment achieved in the first phase;

## Summary

Health and Safety risks in our industry are well recognised and understood but on occasion lessons learned can be lost and not shared with new entrants. Trust has been established between companies to openly share experiences and lessons learned. ENA has established a framework of committees that effectively address all current issues.

A good relationship has been established with HSE at all levels – operational and policy. Owing to efforts such as Powering Improvement, the electricity industry is regarded by HSE as "lower risk".

A good relationship with Trade Unions has been established and maintained - this remains vital.

ENA's SHE function and member companies are well positioned to meet new challenges going forward which include: innovation, new technologies, working with contractors, ageing assets and ageing workforce.

Maintaining "industry memory" regarding past fatalities and incidents is vital

## Final Thoughts:





# Doug Wilson, UK Director H&S ScottishPower, Chair ENA SHE Committee (2011 – 2015), Chair Company-Side National HESAC (2011 – 2015)

Success has many authors and friends, the real measure of commitment is who shows up when circumstances are more challenging. Leadership is not a performance art and meaningful consultation and engagement with our key stakeholders takes time, personal effort, sincerity and patience. The industry health and safety performance has undoubtedly improved over time, however it would be folly to believe the job is done. Our industry faces many new significant challenges where the health and safety of our employees, contractors, customers and the public will be a fundamental element of measuring success. We cannot afford to forget the lessons learnt from past incidents and must redouble our efforts to move our collective performance from excellent to exceptional.

# Peter McCormick, Chair ENA SHE Committee (2005 – 2011), Chair Company-Side National HESAC (2005 – 2011), ENA Powering Improvement Coordinator (2011 – 2015)

Having been privileged to be involved in the journey so far at company and trade association level throughout SAFELEC and Powering Improvement it has been enlightening to see what has been achieved through collaborative working with our stakeholders the Trade Unions and the Health and Safety Executive. The improvements we have delivered to date have been achieved during unprecedented levels of change that the industry has undergone throughout the period. An important driver in delivering the performance improvements that we have seen so far has been the building of trust between all stakeholders and it will be important to maintain and build on this. The road that we have travelled together has not always been easy to navigate and we have had and will continue to have our differences. That said there can be no more important goal than ensuring the safety of the people who access, operate and work on company assets and it will be important that all stakeholders continue to recognise this as the agenda moves to the delivery of Powering Improvement 2. With yet more change on the agenda including the regulatory climate both safety and economic and the changing political landscape coupled with potential corporate memory issues the challenges ahead will be significant and should not be underestimated, and it will be important that the lessons of the past are not forgotten and continue to shape the future. As I stated previously it has been a pleasure and a privilege to have travelled on the journey this far and I wish you success and good luck for the future

