



Electricity Engineers'
Association

Safer Workplaces

*Submission to the Independent Taskforce on Workplace Health and Safety
23 November 2012*

Submission Outline

This submission is on behalf of the Electricity Engineers' Association (EEA). The EEA is the national association representing the electricity supply industry (ESI) on safety, engineering and technical matters.

The EEA submission is structured as follows;

- Part 1 - Introduction to the EEA and ESI and overview of the EEA's role in the industry
- Part 2 - Key discussion and recommendations. This section conveys key discussion points and recommendations to the Independent Taskforce (Taskforce)
- Part 3 – Response to Safer Workplaces Consultation Document Questions.

Please note that Part 3 includes additional material not detailed in Part 2, as comments and suggestions for Taskforce consideration.

Part 1 Introduction

1. This submission is from the Electricity Engineers' Association, P O Box 5324, 158 The Terrace, Wellington. The contact person for the EEA is Peter Berry (Executive Director) on e-mail [redacted] or Bernard Healy – Health and Safety Coordinator ([redacted]).
2. The EEA is the national association covering safety, engineering and technical matters for the electricity supply industry (ESI - the electricity generation, transmission and distribution sectors) in New Zealand. EEA provides the industry with leadership, expertise and information on safety, engineering and technical issues affecting the industry. EEA has over 35 corporate members and 300 members from electricity generating and retailing companies, transmission and distribution network companies, engineering consultants, contracting companies, equipment suppliers, and other companies involved in the ESI. The EEA spans approximately 12,000 Full Time Equivalent (FTE) employees across all ESI sectors. Appendix A provides a list of EEA Corporate Members.

3. The EEA operates through an industry representative committee structure. On safety issues the EEA Safety Strategy Policy Group (SSPG) is the focal point for all industry safety and it comprises representatives from across all ESI sectors.
4. The SSPG provide an industry wide consultative process and manages publishes and maintains industry best practice guidelines. Since 1995 the EEA has coordinated and published the national ESI safety rules (Safety Manual – Electricity Industry (SM-EI Parts 1-3)) which are the minimum safety rules applied in the industry.
5. The EEA undertakes research into significant hazards; monitors safety performance within the industry (and other associated industries); works closely with Government policy makers and regulators; and provides regular and on-going support for SM-EI and any associated guidance documents. The EEA liaises with other jurisdictions internationally to monitor international practices and we circulate overseas and national industry incident information to promote improved safety performance within the industry. The EEA also provides training and forums to support the safety rules and associated guidance material.
6. In 2008, the EEA prepared, consulted and published the ESI Workplace Safety Strategy to 2020. The Strategy vision is: “Safe and Healthy People in Well Managed Productive Work Places”. The industry has a strong “compliance” culture that is based on the rules, systems and procedures in place within the industry and the significant work undertaken to monitor and continuously improve these over the past 15 years. Rules and systems can and will always improve.
7. The Strategy had noted that the industry safety performance in the preceding two decades had plateaued and it identified that the challenge in improving safety performance was to influence behaviours at all levels, since these are strong precursors to incident experience. Organisational safety culture (the collective practices of organisations) is foundational to this change and this has been our focus since 2008. At the launch of the ESI Workplace Safety Strategy, Professor Andrew Hopkins (Professor in Sociology ANU and international safety researcher), set the scene for the challenges our industry faced. A copy of the ESI Workplace Safety Strategy to 2020 can be downloaded from - http://www.eea.co.nz/Category?Action=View&Category_id=344.
8. Since 2008 the EEA and ESI has been focused on strategically addressing leadership issues, organisational issues, and cultural/behavioural issues. Every individual in our industry has a role and responsibility to improve safety performance -
 - Boards of Directors who make decisions impacting safety and who establish responsibilities and accountabilities for their senior management team;
 - Executive and Senior Management who establish the culture, led by example, visibility, who set performance requirements and enable activities;
 - Designers who consider those constructing, using and maintaining, or being near what they design;
 - Managers and Supervisors who plan and optimise financial, human and material resources to productively and safely meet their objectives;

- Employees who have direct responsibility to themselves, peers, family and friends to go home safely and in good health after every day or shift.
9. The EEA's specific initiatives in the past three years , have included -
- Research, review and improvement in over-arching industry rules and guides for controlling significant electrical hazards to employees;
 - Improved standards and practice for asset safety for persons in the vicinity;
 - Introduction of an industry Safety Climate Project to focus leadership, and employee engagement, and to achieve lead indication able to drive measurable proactive improvement towards strategic goals;
 - Continuing the EEA Safety Statistics Project established by the EEA in 2003 to monitor and internally benchmark safety performance among all ESI sectors;
 - Availability of a national incident reporting system and more recently preparing specifications to improve sector information sharing by developing a web-based alert system and broad lag indicators with intelligence to better share and inform preventive measures across the ESI.

Industry Performance Indication - Overview

10. The EEA Safety Statistics Project has obtained yearly data since 2003 from all sectors of this industry including Generation, Transmission, Distribution and Retail, inclusive of their contractors where reported. Data is Lost Time Injury based, representing agreed definitions and readily available data that participants were able to share. The chart below indicates Lost Time Injury Frequency by sector and average whole industry since 2003. The plateau effect (dotted line) stimulated considerable emphasis on leadership, organisational and human factors issues among other foci in the ESI Workplace Safety Strategy to 2020. This aligned industry action with industry knowledge about injury experience, latest available research and also other jurisdiction strategies. All of these emphasised the need for focus on leadership and behavioural issues at all levels, to realise the next step improvement in safety performance.

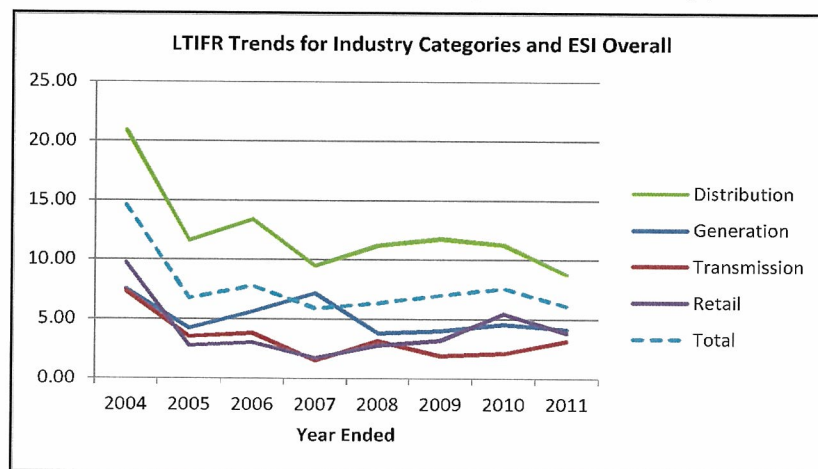


Chart: Lost Time Injuries per million hours (LTIFR), by sector and total electricity supply industry, 2004-2011. More explanation is at Appendix B.

11. It is noteworthy that the EEA has implemented a comprehensive lead indicator process (the ESI Safety Climate Project) able to drive proactive improvements among participating companies, and that the EEA expects to broaden ESI lag indicators for improved tracking of recordable harm from 2013. The latter measures will align with those agreed among the Business Leaders Forum for wider consistency and benchmarking. Both lead and lag data sets used in the ESI will yield safety intelligence to aid prevention across the industry. The above EEA led processes are intended to decrease the LTIFR from the plateau and to proactively drive the industry towards strategic aims for safety excellence.

General Comment

12. The EEA supports the Government's initiative in establishing the strategic review of the workplace health and safety systems in NZ, and appreciates the opportunity to make this submission to the Taskforce. The EEA is available to undertake further discussion with the Taskforce, and/or provide any relevant information or comment that will assist the Taskforce to develop its recommendations.
13. The EEA is fully supportive of Government's strategy to reduce workplace death and serious injury by 25% by 2020. The EEA recognises that the ESI death and serious injury rate have not attained "zero", and there are many important initiatives being undertaken within the ESI that are relevant to the Government's strategy. Some of these are further referred to in this submission.

EEA Submission Part 2 and Part 3 Nomenclature

14. The EEA Part 2 submission follows the sequential section numbering of this EEA submission document. All of the EEA Part 3 comments and suggestion for Taskforce consideration are numbered according to the Taskforce Consultation Document Questions to which they refer.

Abbreviations:

BPG	Best Practice Guide
EEA	Electricity Engineers' Association
ER	Experience Rating
ESI	Electricity Supply Industry
EWRB	Electrical Workers Registration Board
HSE Act	Health and Safety in Employment Act
MBIE	Ministry of Business, Innovation and Employment
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SCP	EEA-initiated 'Safety Climate Project'

Part 2 Key Discussion and Recommendations

Engagement of Professor Andrew Hopkins

15. The EEA recommends that the review Taskforce engage Professor Andrew Hopkins (Australian National University) to comment on the proposed regulatory and company corporate improvements proposed by the Review prior to its submission to Government. This sort of peer review should help evaluate the veracity and workability of the Review recommendations, particularly identifying any potential ambiguities and conflicts that may inadvertently undermine the Review goals. Professor Andrew Hopkins has accumulated significant experience and knowledge in the field by examining and researching major incident events. This includes analysis of company organisational and regulatory drivers contributing to these incidents, and recommendations to minimise the effects in the future.

Recommendation

16. That prior to its submission to Government, the Review Taskforce engage Professor Andrew Hopkins (Australian National University) to comment on regulatory and company corporate improvements proposed by the Taskforce. .

Workplace culture and Safety Behaviours

17. The ESI recognised some years ago through its own research and observation that its safety performance had plateaued at a level above zero, and that further improvement would not be achieved through focus solely on procedures and system improvements (see paragraph 7 above). The areas of focus to achieve improvement were identified as including leadership and culture (organisational practices), and behavioural safety, as applied to all levels within undertakings. The ESI has since invested considerable energy and resource into this area. Asset owners and contractors are implementing a range of behavioural and culture improvement initiatives that capture these issues.
18. The EEA notes that the Taskforce discussion paper refers to safety behaviours in a global way, e.g. that most persons in vehicles now wear seat belts, but it does not address some of the more in-depth behavioural safety programmes being implemented and their results.

Recommendation

19. The EEA recommends that regulatory reform supporting safety cases / guidance and codes, and delivery of support, should recognise and include coverage of leadership, workplace culture and human factors safety issues.

Regulatory Safety Framework for Industry Sectors

20. The EEA believes that significant challenges to the emerging regulatory framework will be:
 - to recognise the industry sectors that have the capability, willingness and the capacity to adequately self-manage;

- to provide the regulatory tools that enable self-management; and
 - to provide guidance that encourages balanced focus on personal safety and process safety¹/safety of the process².
21. The “low touch, high trust” model and almost total reliance on the employer to adequately manage health and safety has proven to be unsuitable in some sectors. However regulatory review should not mean that intensive regulation is required in all sectors going forward. The EEA believes that the framework should support a risk-based approach for larger undertakings, with regulatory interventions that are commensurate with the risk, capability and capacity to effectively self-manage. To achieve this, the regulatory framework needs to recognise categories of undertakings and enable transparent safety management systems appropriate to each.
22. The framework also needs to encourage adequate understanding about the distinctions between personal, process safety and safety of the process, to motivate balanced attention to each, and to provide guidance commensurate with relative risks across these disciplines.

Undertaking Categories and Safety Categories

23. The EEA proposes as the basis for a regulatory framework that undertakings can be categorised based on their hazard profile:
- *Major hazard undertakings* could experience multiple fatalities and injuries from a single event involving loss of containment, large explosive events etc. These undertakings would include, for example, mines, large gas processing or refinery installations having flammable or explosive capacity.
 - *Medium hazard undertakings* controlling plant or processes where uncontrolled energy or substance release is unlikely to involve more than a single fatality or case of serious harm. These undertakings may include, for example, generation, transmission and distribution of electricity.
 - *Low hazard undertakings* for which their hazards and risks are much more localised and fall outside the scope of the previous two, for example: farm or factory undertakings; fishing or forestry.
24. The EEA submission focuses on the first two categories. It recognises that, aside from personal safety, which is common to all undertakings, the first category –major hazard undertakings - requires attention to *process safety* to prevent containment loss or major explosive events that can cause multiple fatalities. The second category – medium hazard undertakings - requires attention to the ‘*principles of process safety*’ (referred to as ‘*safety of the process*’ for discussion purposes) to prevent the sorts of asset-related

¹ *Process safety* is a term commonly applied to major hazard facilities for chemicals and requires focus on assets, operations or processes that comprise a manufacturing system, storage facility and/or extractive operation to ensure that the process, storage or operation is operating safely, protection and control systems are adequate and functional, and emergency procedures and capability are in place.

² *Safety of the process* is a term used in this submission to identify the *principles* of process safety with respect to ensuring a process, storage facility or extractive operation is operating safely and protection systems are adequate and functional. It is not limited to chemicals.

events that may cause single or very few fatalities or injuries. Process safety and 'safety of the process' are each applied to control their respective hazards as outlined. But both share a common focus: to prevent low frequency high consequence hazard events from happening.

25. In the case of the New Zealand ESI, management systems are deployed to enable the industry self-manage for both personal safety and safety of the process. However the EEA acknowledges that in the light of research into recent major process safety events (*cf* Professor Andrew Hopkins publications on major process safety failures), the learnings drawn from these must be adapted and applied for improving safety across all three categories of hazard undertakings, where relevant to each. The EEA believes that the Regulator has an important role, helping to communicate information and to set expectations through codes and guides, to support appropriate management systems and continual improvement of these within the industry.

Regulatory Framework for the ESI

26. The EEA recognises that other jurisdictions, e.g. Victoria, legislate for major hazard facilities and require safety case preparation and approval. The Taskforce may consider that control of major hazard facilities is required, as exemplified by the Department of Labour establishment of a High Hazards Unit. The EEA believes that the ESI is more aligned to the medium hazard undertakings, since the ESI does not have the capacity for major multiple-fatality events, as do the major hazard undertakings.
27. The EEA believes that ESI companies are medium hazard undertakings as described above, and that having requirements for 'safety of the process' are relevant. The EEA also submits that the ESI medium hazard undertakings should not be subject to specific regulated system, control and oversight requirements that are appropriate for major hazard facilities. The EEA believes that both medium hazard undertakings and also major hazard facilities are best placed to manage their own 'safety of the process' and process safety respectively, and that prescriptive requirements are not appropriate. It is our view that should the Taskforce recommend significant regulatory intervention, then MBIE would require considerably more process expertise to support a prescriptive approach anyway.
28. The EEA supports the principles of the Australian Model Work Health and Safety Act Part 2 Divisions 2 & 3 and would support consideration of NZ adopting the range of duty holders described. However, as is the case in the Australian Model Act, only the key duties should be specified with any detail to be provided in regulation and codes.

Appropriate Codes and Guidance

29. The EEA submits that consideration should be given to having available an appropriate mix and emphasis on personal, process safety and 'safety of the process' guidance going forward. The Department of Labour has published many documents on personal safety. But observers could interpret the ratio of available personal safety guidance to process safety guidance, for instance, as indicative of the relative importance placed on each. It is noteworthy that process safety related major events such as BP Texas

City, and Pike River are relatively rare, characterising low frequency high consequence hazard events that can happen with major hazard undertakings. However the high consequence effects should require an appropriate level of emphasis on process safety or on 'safety of the process', as the case may be, to help undertakings give these adequate emphasis in practice.

30. A review of Department of Labour publications on its website indicates that only very few publications address matters of process safety, with the majority addressing matters of personal safety. The process safety matters that are considered in regulations and/or publications can be identified as:
 - Boilers, pressure equipment and cranes (PECPR Regulations and ACOPs)
 - Hazardous substances (HSNO legislation and EPA publications)
 - Pipelines (Pipelines regulations and ACOP)
 - Major hazard facilities (ACOP)
 - Mining and quarrying (Regulations)
31. As already discussed, one purpose for process safety and 'safety of the process' is to understand and control hazards having potential to cause low frequency high consequence events. A key learning from the BP Texas City Refinery investigation was that BP was very focussed on 'slips, trips and falls', and insufficiently focussed on process safety. Investigation showed that this response was partly driven by regulatory influences, among other things. The EEA submits that guidance in New Zealand ought to incorporate process safety and 'safety of the process' principles and learnings from recent high profile events. This would help inform undertakings so that they give adequate and balanced emphasis to personal and process safety/'safety of the process' as appropriate to their undertakings.
32. In line with this principle, the EEA also submits that guidance should include advice on governance, management and organisational activities that research has found underpinned recent major process failure events. This will promote continual improvement towards operational excellence.
33. To summarise, guidance on process safety and 'safety of the process' could include:
 - Setting clear expectations for the categories of undertakings, including those that focus adequate attention at governance and senior management level commensurate with the safety risks;
 - Recognising and motivating the right balance in attention to process and personal safety, as applicable to hazards and risks for the categories of undertakings;
 - Recognising capacity to self-manage, self-monitor and continually improve;
 - Recognising the role and capacity for industry associations or other groupings to influence standards and outcomes, and to provide specialised solutions to specialised situations;

- Striking the right balance between the level of attention by regulatory staff, what level this is pitched at in the undertaking, and the skills and experience appropriate to each.
34. The EEA submits that the approach outlined above would be an acceptable means for communicating regulatory expectations as the basis for the ESI to self-manage its undertakings.

Recommendations

35. That the Taskforce recommend a regulatory framework that recognises and supports self-regulation among major hazard and medium hazard undertakings, and that guidance setting expectations include an appropriate balance of process safety / 'safety of the process' relevant to the undertakings.
36. That requirements addressing 'safety of the process' and process safety, particularly for medium hazard undertakings and major hazard undertakings be published in an Approved Code of Practice.

Information Sharing

37. One of the services that the EEA provides is to disseminate information to the ESI after an incident occurs. Invariably businesses within the ESI quickly hear that an incident has occurred, and ask the EEA for further information. A frustration that the EEA experiences is that it is only rarely that it can provide information in a timely fashion.
38. Considerable effort has been put into encouraging ESI companies to share safety incident information among industry peers. This is for the purpose of sharing new or updated hazard information industry-wide and for multiplying the learnings and preventive effects after loss-producing events or significant close calls. Continuing this has become almost impossible since Department of Labour staff have used incident information shared in the public domain among peers, in good faith, for the purpose of pursuing their own prosecution. The net effect is that the industry is reluctant to share incident learnings for fear of litigation.
39. The EEA and industry participants support fair legal action for failure to perform to the standard required by workplace health and safety statute or regulation. However, the EEA recognises the potential perverse effects: that information or learnings *not* shared for reasons such as outlined above may in fact allow further similar cases of harm, thus defeating the objective of preventing accidents.
40. When an incident occurs, ESI companies need to know whether it related to an item of equipment that they may have, or to a process that they use, in order to circumvent a similar occurrence. It is vital that such information can be provided in a non-prejudicial way.
41. Incidents where injury has occurred are frequently not communicated to the wider industry until all investigations are concluded (which could be several months) or until a charge is laid, or even until the court case is concluded. This potentially means that incident information is not available for a year or more.

42. 'All practicable steps' by definition includes knowledge that a person should have had and taken into consideration. The EEA submits that the regulator needs to acknowledge the accountability they have in influencing behaviours through information suppression, and the regulator should support the sharing of lessons learned in a timely manner.
43. The Health and Safety in Employment (Pressure Equipment, Cranes and Passenger Ropeways) Regulations contain (regulations 14 & 15) provision for the notification and correction of type faults. The principles of these regulations need to be expanded to cover a broader range of circumstances and included in the HSE Act and other regulations as appropriate.
44. Alternatively, the Taskforce could consider recommending that the MBIE become responsible for preparing and disseminating key incident information as soon as practicable.

Recommendation

45. That the Taskforce adopt a principle that prompt non-prejudicial peer sharing of incident and hazard information for preventive purposes, independent of any compliance process, is an essential element of safety management.
46. That the review enables non-prejudicial sharing of incident and hazard information for preventive purposes.

Influence of Economic Regulators on Safety

47. An industry-based management/employee participative health and safety evaluation process (the industry Safety Climate Project – 'SCP') has been underway in the ESI since mid – 2010. Process feedback enables the EEA to identify common themes to be assed for industry-level response. One important issue emerging has been a widely held perception among field staff that regulated economic KPIs as drivers for ESI performance are impacting workplace processes and employee workplace safety experience. These economic KPIs can also be influenced by capacity or market changes and constraints. For example, for electricity supply network companies, the KPIs include system average interruption index (SAIFI) and system average interruption index (SAIDI). Failure to meet target indices can incur very significant financial penalties. Some of the factors influencing the KPI results are not controllable by the electricity networks. The widely held perception being fed back from employees and their supervisors is that the risk of breaching KPI limits and the threat of large penalties are translating into work design, planning and work site issues that impact safe work conduct. The EEA is most concerned at this perception and is working to understand any links between economic regulation, performance KPIs and safety delivery through work design/planning processes, field processes and workplace safety performance.
48. It is noteworthy that recent research into disasters such as Longford and other major petro-chemical events cited regulatory influences as underlying factors having similar parallels to the perceptions outlined above. The EEA and the industry are considering models to better manage these concerns. For example a current review of high

voltage live line work practices and policies for determining when live line work is appropriate, will endeavour to better understand and redress imbalances arising from SAIDI and SAIFI. This process will include discussions with the economic regulator.

49. The EEA believes an important aspect of legislative reform to improve New Zealand safety performance should be the proactive identification of conflicting regulatory drivers that have the potential to adversely influence on-going management and worker behaviours. Such reform could include, for example, obligations on all Regulators introducing or reviewing regulation, to consultatively risk assess their regulation for safety consequences or safety performance implications. Consultation with industry representatives is vital to realistically understand and assess the impact of these issues. This process should enable the proactive identification and mitigation of potential conflicting safety/economic/ or other performance drivers, before regulations come into force. This approach should also have application to current regulations already in force where adverse safety effects are indicated.

Recommendation.

50. That the Review recognise the issues outlined above and provide for eliminating regulatory drivers that conflict with desirable management and employee safety behaviours;
51. That the Review considers the consequences of economic drivers on safety performance;
52. That the Review requires economic regulators to consult on their regulation with an objective of avoiding adverse effects on the performance of safety.

MBIE as Prosecutor or Advisor

53. An area for concern is the overlap between the current MBIE and ACC information and advisory function. There is widely felt discomfort with the split enforcement and information/advisory role under the one MBIE entity. The EEA is also concerned that the ACC also has split roles across compensation, rehabilitation and accident prevention. The EEA view is that traditionally ACC's expertise and effectiveness has been focussed on compensation and rehabilitation, and a relatively minor role in accident prevention, mainly targeting SME's. In EEA's view there should be one centre of excellence for supporting workplace prevention, and that this centre should sponsor and support industry associations and bodies to deliver prevention services and support to their own constituents. Such associations are usually better positioned and have detailed knowledge and can call on sector support to resolve safety issues and promote improvement.

Recommendation

54. That the proposed stand-alone regulator, or the body such as MBIE tasked with regulation, carry out the role of enforcement, and that a single centre of excellence provide for advice to work places, support and liaison for industry associations.

Regulatory Challenges and Approach

55. The EEA notes the many structural and funding changes over the last two decades that have influenced health and safety regulator's roles, capability, capacity and delivery.
56. There is a need for clear objectives, role definition and a new approach to achieving capacity and effectiveness. Some bold initiatives are needed to permanently reduce the huge economic cost of accidents and to effect major workplace culture change in New Zealand.
57. The regulatory structure should clearly state expected outcomes, enable different safety performance models, promote operational excellence and require continuous improvement, i.e. a structure and administration oriented to encouraging and 'incentivising' constructive inputs, not fear of failure to meet compliance. The system should be punitive only for gross disregard, or where there is unwillingness to improve.
58. The EEA believes the safety regulator being positioned within a governmental structure driven by years of cost-cutting and the pursuit of 'efficiencies' has significantly affected the regulator's functional capacity and capability. The approach taken to date has created an environment of mixed and often incompatible roles (e.g. educator vs. enforcer) that have not adequately accounted for the burgeoning and unsustainable accident costs to NZ. The arrangement has resulted in thin field coverage, limitation of expertise and experience in some sectors, inadequacy of expert information and limited support and liaison with industry key stakeholders. NZ needs to develop and maintain a centre of safety excellence.
59. An additional challenge for the regulatory system is to recognise and support the capability and capacity of sectors (like the ESI) to work with the regulator to self-regulate. The EEA believes the most effective support would be:
 - For regulation to promote and encourage operational excellence (including governance and management practice) above mere compliance;
 - To have regulatory staff who are able to deal with ESI representative associations and senior managers;
 - To recognise specialty and independent ESI practice guidance.
60. Under such a framework the regulator (or independent third party) could audit to ensure compliance, and the penalty system would still be available for failure to achieve safety outcomes. A framework having these features would better support ESI self-management. The EEA acknowledges, however, that other industry sectors (most notably SMEs) may require a different model to drive better safety performance for their particular circumstances.
61. Other concerns about the current regulatory administrative system include:
 - The desirability of maintaining functional independence.
 - Role conflict, mixing guidance with the enforcement role – 'clients' never being sure when the latter will turn into the former, without notice.

Recommendations

62. That the workplace regulatory body should be small, focused and an independent stand-alone body, mandated with clear objectives through legislation, directly funded out of workplace levies, and funded to the extent that it can attract, train and deploy adequate resources to meet key safety performance outcomes and society goals for a level of effective enforcement..
63. The regulatory body should also:
- Have a clear mandate about the regulator's role and objectives, which should be enforcement alone, powered by adequate expertise and numbers of specialist staff to make a credible impact.
 - The regulatory enforcement side should be complemented by a Centre of Excellence for guidance on health and safety knowledge and practice, freely available especially to SME's.

Improving Director and Leader Participation

64. The EEA believes that motivating and achieving improved director and leader participation is essential to achieving Strategic Review aims for workplace safety improvement. Appropriate regulatory provisions and supporting guidance and information have an important role informing and supporting directors and leaders to achieve their responsibilities.

Recommendations

65. The EEA recommends that provision for improved governance and leadership should comprise a combination of:
- Legislative reform that focuses on achieving continual improvement towards excellence, not merely focus on compliance;
 - Reform that permits open non-prejudicial learnings and information exchange outside the regulator compliance enforcement circle, for multiplying post-incident prevention;
 - Incentives in the safety system that raise the profile of safety to the same level as any other business risk;
 - Governance, leadership educational information, and guidance information available through the proposed centre of excellence;
 - Development of accepted practices and recognition through membership of associations and organisations such as the Institute of Directors.
66. The sections "Regulatory Safety Framework for Industry Sectors" and "industry Categories ..." above outline how the ESI should fit within an applied regulatory framework that is cognisant of hazard categories and risk of harm. The focus for the ESI should be on self-management as a medium hazard group of undertakings through already established Safety Management Systems.

Role of Supervision

67. In the EEA's experience and observation of workplace H&S practices within the ESI and other industries generally, effective work-party and worksite supervision continues to be a critical part of safety management. The supervisory role requires many aptitudes and attributes to enable effective supervisory function. For example supervisors need well developed people management and communication skills; they need ability to influence and enable safety inputs and outcomes to carry out their role effectively. The EEA believes that incorporating information about the broad range of supervisory attributes, qualities and competencies into available guidance would help improve recruitment, coaching and performance review for this critical role.

Recommendation

68. That guidance material covering the full scope of supervision, include not only roles and responsibilities, but also material to support employers to recruit appropriate supervisors, to coach, mentor and also to review their performance.

Part 3 – Response to Safer Workplaces Consultation Document Questions

Part 3 includes material additional to Part 2, presented as comments and suggestions numbered to correspond with the Consultation Document Question numbers. In some cases there are multiple responses, for example against Discussion Document Question 6. The multiple answers are numbered serially as 6.1, 6.2, etc.

Question Number	Issue	Comment
1	<i>Safety outcomes for demographic groups</i>	<p>The EEA concludes from the data presented in the consultation document that cultural and attitudinal factors are key contributors to some groups being disproportionately represented. The ESI experience has been that older, male, more experienced workers are over-represented in injury and fatality data. The consultation document indicates that experienced workers, male workers, self-employed workers, and Maori workers are among those more likely to suffer injury at work. The risk profile and experience must be acknowledged and long term programmes developed to challenge and change attitudes and behaviour at all levels in undertakings. Any long term sustained improvement will occur only when the overall culture in the workplace is changed so that the safety message effectively reaches these groups having the highest injury rates.</p>
1.1	<i>Factors driving differences in health and safety outcomes for different demographic groups – basic skills</i>	<p>The ESI employs people from all over the world, with significant numbers from Asia, Pacific Islands and South Africa.</p> <p>International employees are vetted for their occupation-specific competence before entering the industry, but the following must be specifically addressed:</p> <ul style="list-style-type: none"> • English as a second language • Allowing for cultural backgrounds that are relatively more acquiescent than the New Zealand culture and less likely to challenge inappropriate or unsafe instructions; • Employer policy and practice that recognises demographic distinctions, for example equipping supervisors with knowledge and skills to understand and take account of these for safe outcomes. <p>An issue that is more generic (includes people of NZ origin) is a lack of numeracy and</p>

		<p>literacy skills, particularly amongst field workers.</p> <p>The EEA and ESI take such issues into account in the preparation and presentation of guides, training material and its methods of instruction. The poor literacy and numeracy is a result of failures within the NZ education system. Achieving an adequate base level of literacy and numeracy skills is vital to improving safety and performance in the workplace.</p> <p>The EEA, the Electricity Supply ITO and employers are working hard in this area and understand Government is well aware of these issues and is endeavouring to address these urgent needs through improving education delivery and quality review.</p>
1.3	<p><i>Factors that drive differences in health and safety outcomes for demographic groups – maintaining personal responsibility.</i></p>	<p>There is a balance with respect to safety and other matters within the workplace between the responsibility of the employer and the responsibility of the worker. If too many systems, procedures, controls and protections are put around the employee, the employee may assume that no matter what they do, they will not come to harm. Employees can also resent being denied opportunity to think for themselves and they may feel that they have no control. It is considered important for the worker to retain an appropriate level of responsibility for their own safety. While it is practicable to establish many controls around hazards, there is still a need for a high level of 'hazard awareness and response' to be managed by workers competency, skills, knowledge, alertness etc.</p> <p>For example, while cars are made progressively safer they still rely on the skill of the driver to ensure the driver's and other road user's safety. Similar trends are noted with machine and systems controls.</p> <p><i>Recommendation</i></p> <p>That the Taskforce Review take cognisance of the role and responsibilities that employees have, including an adequate mix in regulatory incentives for employees to conform to reasonable safety requirements.</p>

2	<i>Changes needed to workplace H&S framework to improve outcomes for demographic groups</i>	<p>The overall health and safety framework must be changed to place much greater emphasis on developing and improving safety culture in New Zealand workplaces, including positive, constructive approaches to encourage safe behaviour from a diverse range of perspectives.</p> <p>The employer has a critically important role, but this cannot be left to employers, employee representatives or to unions alone. There is a need for co-ordinated, multi-tiered initiatives from government, regulators, industry associations, employers and unions, to reach out via multiple channels to those who appear most at risk. Employees themselves must be involved. Initiatives must have the capacity to challenge safety beliefs and behaviours, and drive improved safety culture. These initiatives must be designed to respond to the attitudes and behaviours that are the root cause of the high rate of injuries among these more vulnerable groups. A punitive, sanctions based approach is unlikely to be effective on its own (although appropriate legal sanctions are nevertheless deemed essential).</p> <p>The EEA submits that incentivising effective engagement with employees for their feedback and contribution to safety inputs, combined with management commitment to continuous improvement, are key to improving safety culture, including across demographic groups. Examples in the ESI include use of the EEA initiated Safety Climate Project as an iterative workplace feedback and improvement process; use of the DuPont ZIP programme and also other culture improvement initiatives among ESI members. These on-going processes are able to progressively identify significant issues and root causes for co-operative employee / employer responses.</p>
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3.1	<i>Challenges with the current workplace H&S regulatory framework</i>	<p>The issues summarised in Consultation Document paragraphs 89 & 90 are a fair summary of the challenges facing the regulatory framework.</p> <p>In Part 2 of this submission the EEA has provided its comments on large business/sector undertakings and major hazard industries.</p> <p>For SME undertakings, the EEA acknowledges that many of the challenges being experienced in the New Zealand framework would appear likely to be addressed by some of the international regulatory practices discussed, most notably the 'persons conducting a business or undertaking' concept, more effective deterrents, more regulatory certainty through the 'safe harbour' approach for smaller undertakings, obligations on directors, and use of the risk-based approach with more formalised risk assessment and management systems.</p> <p>The EEA is also aware of other regulatory challenges that have a direct or indirect influence on workplace safety risks to employees and others. These include (and are dealt with in the designated submission sections below):</p> <ul style="list-style-type: none"> • Distinctions between workplace and public safety regulatory governance (see 3.2 below); • 'Product' safety – as in completed work having significant-hazard potential to the customer (see 3.3); • Level of penalty (see 3.4, which refers the reader to Submission Part 3 section 16). • Means of compliance (see 3.5) • Large business vs SMEs (3.6) • Presumption for higher H&S standards (3.7)
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3.2	<p><i>Challenges with the current workplace H&S regulatory framework – Lack of clarity for workplace safety governance</i></p>	<p>The EEA supports the principles of the current Health & Safety in Employment Act (HSE Act) and its regulations, and confirms its support for the original approach to its development.</p> <p>The EEA made a submission to the Select Committee review of the HSE Act in 1996, in which a key recommendation was that workplace safety should be governed only under the HSE Act and that the energy Acts (Electricity and Gas) should focus solely on public safety. This recommendation was taken up by the Select Committee and relevant amendments to the Electricity and Gas Acts made in 2006, with subsequent amendments to regulations in 2010, to specify that they apply to public safety only.</p> <p>However, the EEA continues to note that there are perceptions that the Electricity and Gas Acts still apply to workplace safety, and clear messages are not being provided by regulators, statutory Boards, etc. that there is a specific distinction between the two.</p> <p>The issue is most apparent to the EEA for licensed persons performing prescribed electrical work (PEW), as licensed by the Electrical Workers Registration Board (EWRB). The EWRB prescribes the criteria for examination and licensing of persons performing PEW. The EWRB also controls a disciplinary process for licensed workers. It needs to be recognised that while licensed workers are performing work their workplace safety obligations derive from the HSE Act; however, their product safety (the safety of the product that remains after they leave the workplace) obligations derive from the Electricity Act. Following this logic the licensing of the worker can focus only on the way they perform the wiring work and the quality of the finished product. How safely they use a ladder, for example, is an HSE Act obligation. It should be noted that the employer licence provisions for persons performing PEW enable a greater accountability by the employer.</p> <p><i>Recommendation</i></p> <p>That regulatory reform and supporting guidance and administration take cognisance of and reinforce the distinctions between workplace safety coverage and 'product' safety pre-</p>
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		requisites for persons licensed to do prescribed electrical work in the electricity industry, including those working under an employer licence.
3.3	<i>Challenges with the current workplace H&S regulatory framework – Clarity for product safety accountability</i>	Further confusion arises from the model described in 3.2 is the accountability for the completed product. If a business manufactures and installs a conveyor system, for example, the employer is accountable for the competency of the employees who perform the work, their safety while on site and the safety of the installed conveyor as left. However, for PEW the employer does not retain accountability for the completed electrical work as that is strictly an accountability of the individually licensed person who performed it, for which they can be disciplined by the EWRB (This does not apply in the case of an employer licence, under which the employer retains accountability). It is possible for an employer to lay a complaint with the EWRB over the performance of one of their employees (who is a licensed electrical worker), whereas in nearly all other circumstances the employer retains accountability for their employees and the work they perform.
3.4	<i>Challenges with the current workplace H&S regulatory framework – Level of penalty</i>	Section 16 "Incentives" later in this Part 3 of the EEA submission expands on the EEA concerns and ideas for the Taskforce to consider, regarding penalties and other possible incentives. This includes EEA comment regarding accountabilities for directors and senior managers.
3.5	<i>Challenges with the current workplace H&S regulatory framework – Means of</i>	As described in Part 1, the EEA produces a range of workplace safety guidance documents that are used by the ESI. EEA documents relate primarily to ESI work practices; however they also take consideration of published MBIE guidance. The EEA has noted that recent MBIE documents are not 'Approved Codes of Practice' as defined in the HSE Act, but are now 'Best Practice Guides' (BPG's) developed in conjunction with industry sectors.

	<p><i>compliance</i></p> <p>The EEA supports the involvement of industry sectors in the development of BPGs, but has concerns that the BPGs are stated to apply to all industry or to all activities of that kind, even though the BPG was written by a specific sector of industry. Specifically, the BPG for <i>Work at Heights</i> was written by the building sector, with no recognition to other sectors who work at height, e.g. the ESI, and who use different but safe means of doing so.</p> <p>The EEA proposes that industry sectors that prepare and disseminate safety guidance should have that guidance recognised as a means of compliance within their sector provided the industry sector is consulted, fairly represented and the essential principles for safety with the specific types of activity are addressed. The essential principles for safety should be provided by MBIE, via the Approved Code of Practice mechanism.</p> <p>Approved Codes of Practice could follow the model of many modern Standards, containing a Part 1 which sets out the essential principles for safety (and often the mandatory part of the Standard) and a means of compliance part that would be suitable for many users (but not mandatory).</p> <p>The ESI prefers a 'safe harbour' for its publications, and submits that technical bodies such as the EEA should have recognition to prepare documentation on behalf of its industry sector, and have that documentation 'recognised' by MBIE in order to provide a 'safe harbour'.</p> <p><i>Recommendation.</i></p> <p>That the Review provide for the regulator to recognise evidence of industry guidance prepared by the industry sectors and that such guidance be recognised as 'safe harbour' evidence of compliance for the industry that prepared them.</p>
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3.6	<i>Challenges with the current workplace H&S regulatory framework – SMEs v large businesses</i>	<p>The discussion paper sets out the statistics for the number and size of businesses in NZ, and notes that SME's comprise 97.21% of all businesses and employ 40.27% of all workers.</p> <p>The performance requirements under the HSE Act are the same for all businesses. Relative to SME's, large businesses typically have more health and safety expertise and resource. They also usually have expertise in the safety of their operation, including where they operate more hazardous processes. They are more expert in the safety of their operation than the regulator will be. There is a case for recognising these factors, and applying a different safety management regime to large businesses.</p> <p>As discussed in Part 2, there is a challenge to ensure that undertakings understand and recognise the need for and balance between 'process safety' and 'personal safety' in their undertakings, and to apply these appropriately. Depending upon the risk profile of the undertaking, 'process safety' can be just as important as 'people safety' and the two are inter-related but require different mind-sets when approaching them.</p> <p><i>Recommendation</i></p> <p>That the Taskforce take cognisance of distinctions between large and small undertakings and ensure that the revised system and its administration apply appropriately to each.</p>
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3.7	<p><i>Challenges with the current workplace H&S regulatory framework – Presumption for higher health and safety standards</i></p>	<p>The discussion paper (at paragraph 88) refers to the Australian Model Act and its requirement that 'although the cost of eliminating or minimising the risk is relevant in determining what is reasonably practicable, there is a clear presumption in favour of safety ahead of cost.'</p> <p>Any inclusion of this provision into NZ law would require careful consideration. The EEA is concerned that such a provision is open to a wide range of interpretation, although the strategy would be to manage its application by way of guidance documentation. How the Courts interpret this provision would be the most significant risk to business.</p> <p>Should a provision such as the above be implemented, the primary accountability goes onto the employer. Such a provision would need to be balanced by placing a greater level of duty and care on the worker.</p> <p><i>Recommendation</i></p> <p>While higher health and safety standards are a preference, the accountabilities of all persons involved and the means by which they are implemented need to consider the implications of the higher standards.</p>
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6.2	<p><i>Changes to regulators' roles and responsibilities – MBIE as regulator, prosecutor and advisor</i></p>	<p>Under the HSE Act MBIE is the regulator, prosecutor and advisor. It has long been recognised that the regulatory and prosecutor roles fit together, but that the advisor role is an anomaly. As a consequence businesses, particularly SME's, are reluctant to consult MBIE with regard to workplace safety. On the other hand they are reluctant to engage an independent advisor because of the cost.</p> <p>The EEA notes that MBIE plans to have significantly more inspectors available to visit and monitor workplaces, which is a response to the increased MBIE funding and in response to the Government's target of a 25% reduction in the workplace fatality and serious injury rate.</p> <p>The EEA submits that MBIE's role as advisor needs careful consideration, and recommends that MBIE should provide recognition to advisors in various forms, and provide advice information but not itself deliver advice at workplaces. There are a number of options for dealing with advice at workplaces, many of which already exist including;</p> <ul style="list-style-type: none"> • Trade and Industry Associations • Health and Safety Representatives • Consultants with formal qualifications and current professional recognition • In-house H&S advisors • Inspection and certification of critical plant and processes. <p>Of the above, Health and Safety Representatives and requirements for some inspection and certification of critical plant and processes already exist, including</p> <ul style="list-style-type: none"> • Inspection and certification of pressure equipment, cranes and passenger ropeways. • Inspection and certification of certain hazardous substances locations and stationary containers. • Certain prescribed electrical work and high voltage installations • Certain gasfitting work.
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		<ul style="list-style-type: none"> • Electrical equipment on construction and demolition sites <p>In addition employees performing certain specified work must hold a certificate of competence, e.g:</p> <ul style="list-style-type: none"> • Asbestos workers • Divers • Electrical • Gas • Boiler operation • Equipment inspectors • Building • Scaffolders <p>The EEA submits that the Environmental Protection Authority (EPA) model be considered as the basis for a HSE Act enforcement model, but with modifications, i.e.;</p> <ul style="list-style-type: none"> • EPA set policy, regulation etc • EPA provides guidance documentation • EPA recognise MBIE as the enforcement agent for workplaces • MBIE investigates incidents and compliance at workplaces • EPA approves Test Certifiers • Test Certifiers inspect hazardous substance locations, stationary containers etc and issue certificates. <p>Under the EPA model, businesses requiring advice can refer to the published documentation, use the EPA 0800 number or consult a Test Certifier or private HSNO</p>
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		<p>advisor.</p> <p>The variation to the EPA model described should be that MBIE should not be directly issuing certificates of competence, but should be recognising 'Qualification Issuing Agencies' as it does under the Health and Safety in Employment (Pressure Equipment, Cranes and Passenger Ropeways) Regulations, e.g. the Certification Board for Inspection Personnel that certifies pressure equipment inspectors and other inspectors.</p> <p>To further support this model and improve workplace safety, tools and equipment that can be classified as 'high risk' should be identified and an inspection and certification regime established if it is not already required. Equipment already requiring inspection and certification is listed above. There are other high-risk equipment items for which some inspection practices are established, but for which the risks would be better managed through inspection/certification by recognised private sector inspectors. Examples include elevating work platforms and rigging. If such equipment were subject to the recommended regime, MBIE inspectors would then need only to check that equipment had current certification.</p> <p><i>Recommendation</i></p> <p>That MBIE should use independent bodies, where they exist and provide a safety function, to carry out advisory and inspection functions on safety critical equipment.</p>
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6.4	<i>Changes to regulators' roles and responsibilities – ACC activities</i>	<p>The EEA believes that the collective responsibility approach under-pinning the ACC no-fault compensation 'contract' for harm at work can have a negative consequence. Collective responsibility for compensating injured workers is admirable so far as it goes, but this collective responsibility does not provide focus in regard to solving the causative issues at work. EEA's submission under Q 16 on 'Incentives' includes ideas for Taskforce consideration for creating incentives for ownership over resolving causes.</p>
6.5	<i>Changes to regulators' roles and responsibilities – MBIE resources</i>	<p>The following is a comment on the current situation of expert resource within the current MBIE structure. Within MBIE, the EEA and ESI generally interacts mostly with policy and technical resource personnel, and occasionally with inspectors. While the people in MBIE are knowledgeable and approachable, in some areas there is insufficient resource. This is particularly noticeable in the technical group where there is one person handling management of the Health and Safety in Employment (Pressure Equipment, Cranes and Passenger Ropeways) Regulations, one handling management of HV electricity, etc. Due to workload the resources are responding to requests rather than being proactive with regard to preparing and disseminating relevant information etc.</p> <p>Given the proposed increase in the number of inspectors, the technical resource numbers also need significant increase and breadth of coverage so that the inspectors are able to access in-house guidance on specialist areas of equipment and process.</p> <p><i>Recommendation</i></p> <p>The EEA recommends that under a revised regulatory framework, the proposed Centre of Excellence would be resourced with adequate expertise to enable proactive response (codes, guidance, advice etc) for specialist areas such as for pressure equipment.</p>

9	<i>How effective is worker participation?</i>	<p>In the EEA's opinion, worker participation across New Zealand workplaces in general has yet to realise the enormous potential that participation has to offer for improving workplace safety performance. The amendments to the HSE Act to introduce employee representation and involvement were a step in the right direction. Our observation is that some employers successfully implemented employee involvement. In most cases this success would have been driven more by the values and attitude of those employers who would be inclined to involve their employees anyway, for the mutual benefits such involvement affords. In many other cases the involvement could be considered pro forma, lacking in substance on real issues.</p>
10	<i>Improving worker participation</i>	<p>The EEA believes that listening to and acting on real and substantial concerns from employees is a potential gold mine for safety performance and for business. This is clearly demonstrated through the Safety Climate Project (SCP) that the EEA initiated in the ESI. The SCP is a collaborative management / worker process that evaluates employee workplace experience across a raft of safety criteria, analyses outputs and plans improvements through participative workshops, and yields data for benchmarking and measuring future change through an iterative approach. The lead indicators integrated with improvement discussion, underpinned by management commitment to listen and make change, is yielding significant safety and business improvements, even in its early stages.</p> <p><i>Recommendations</i></p> <p>The Taskforce review provides an opportunity to help New Zealand reap real benefits through improving employee participation. The EEA submits that reform of the safety system should encourage better employee participation in a number of ways, for example:</p> <ul style="list-style-type: none"> • Legislating for management engagement and employee participation using language about desired outputs, not process (in line with encouraging management and

		<p>operational excellence);</p> <ul style="list-style-type: none"> • Including methodologies and case studies in guidance material; • Enabling use of proven engagement methods and effective improvements as part of defence where serious harm has occurred. <p>Other ways to encourage engagement and participation may include:</p> <ul style="list-style-type: none"> • Recommending surveys of worker perception about their safety experience and factoring data from these into qualifying audit assessments for recognition, for example under WSMP; • Including worker participation data in the Experience Rating equation; • Adopting sector or association based survey and improvement process strategies (such as with the EEA SCP), to benchmark, motivate and share improvements that arise; • Including participation methods, benefits and case studies in safety training for managers.
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11	<i>Extent of effective leadership and governance of workplace H&S by directors and senior managers</i>	<p>The EEA has recognised governance and leadership as keys to ingraining safety improvement, and the EEA's view has been informed considerably by Professor Andrew Hopkin's research and conclusions about the role these have played in major events. The EEA believes there has been considerable improvement within the ESI regarding awareness and focus on these areas over the past decade.</p> <p>As a very general observation about New Zealand as a whole, the EEA believes that one underlying reason for New Zealand's performance compared with other developed countries is that the safety system has not created adequate regard or incentives for sufficient and consistent governance and leadership in safety, nor for these groups to acquire adequate knowledge and skills in these roles. The system still permits less willing and less informed leaders to view safety as an awkward necessity, sometimes a tack-on, in some cases something that competes with profit.</p> <p>The EEA is also aware that many large businesses fully recognise the business, reputational and other impacts that poor safety involves, and they have strong governance and leadership practices. In some cases these practices are driven by international owners.</p>
12	<i>Improving directors' and other leaders' participation</i>	<p>Section 20 of this submission outlines important criteria that ought to be included in safety cases for the major hazard group of undertakings (mines, refineries etc). These criteria focus directors and leaders attention to activities shown to reduce the likelihood of major events that can cause multiple fatalities and injuries. The EEA proposes that these ideas from the (section 20) safety case proposal be adapted to improve ESI Safety Management Systems specifications. These ideas can also be adapted to codes and guides suitable for SME directors and leaders. This approach would focus director and leader attention commensurate with the hazards and risks they manage and it would pitch the requirement to fit their safety resource and capability.</p>

13.1	<i>Capacity and capability to effectively manage workplace H&S issues.</i>	<p>The EEA submits that the ESI companies have the resources to manage H&S issues, and all are focussed on achieving safe outcomes. As previously described, the ESI has its own safety rules and Guides that all companies are required to follow.</p> <p>The EEA promotes self-regulation for the industry and monitors the industry's performance.</p> <p><i>Recommendation</i></p> <p>Effective H&S management within the ESI will be further enhanced by enabling additional self-regulation, removal of the reasons for the inhibition on information sharing, and removal of confusing and/or conflicting requirements.</p>
13.3	<i>Capacity and capability to effectively manage workplace H&S issues – Trade certification</i>	<p>Qualifications exist under the NZQA framework for the ESI. The qualifications meet the requirements of the EWRB for achievement of registration in a class of registration recognised by the EWRB. However, the qualification includes modules in addition to those specified by the EWRB for registration, but which the ESI believes are essential for competency to work in the ESI. The EEA's experience is that once a candidate achieves sufficient modules to gain EWRB registration that is as far as they go as they are then entitled to carry out their range of prescribed electrical work (PEW), and consequently the NZQA qualification does not get completed.</p> <p>As the EWRB registration process is to ensure registered persons can perform PEW to deliver 'public safety' it does not include the required focus on workplace safety that the ESI requires. While workplace safety can be, and is, delivered outside the registration regime, there is a need to recognise that trade certification does not deliver health and safety content apart from its focus on public safety.</p> <p>The EEA has observed over an extended period that trade certified workers believe that their trade certification, e.g. licensing as an electrical worker, has sufficiently trained them in health and safety requirements. This belief is not being challenged by the EWRB, nor have</p>

		<p>they expressed a willingness to make it clear in their training material or registration requirements.</p> <p>There must not be recognition given to 'trade certification' as having provided health and safety training unless the curriculum for that training has been assessed as providing that training.</p> <p><i>Recommendation</i></p> <p>To address the inadequacies of trade certification that under delivers in health and safety training, Government needs to place emphasis on the NZQA framework and qualifications at appropriate levels, and ensure that certification Boards cannot issue registration with lesser criteria than an equivalent NZQA qualification.</p>
13.4	<p><i>Capacity and capability to effectively manage workplace H&S issues – Safety at all times</i></p>	<p>As with any behaviour, consistency is critical to ensuring consistent desired behaviours. For example, anyone who is safety conscious and is driving a motor vehicle will wear a seat belt irrespective of what vehicle they are in and irrespective of whether they are at work or not. Similarly it is essential to promote good safety behaviours at all times, so that when workers are at work they 'automatically' do things safely, and will do so at home or leisure.</p> <p>To achieve this behavioural pattern requires education on and promotion of safe behaviours at all times. Safety outside work is presently promoted by ACC, but on a seasonal or occasional basis. Likewise a number of employers emphasise home safety for their employees.</p> <p>Workplace safety behaviours and 'other than workplace' safety behaviours cannot be separated, and people need to think and perform safely wherever they are. To achieve this requires concerted and on-going campaigns emphasising safety in all circumstances so as to avoid an employer's effective safety training being undone by practices outside work.</p> <p>This principle highlights the importance of regulatory bodies with control on public safety</p>

		<p>ensuring the public safety requirements are adequate and are enforced so that 'total safety' is delivered.</p> <p><i>Recommendation</i></p> <p>That recommendations out of the Taskforce review be mindful of the 'total safety' concept, as far as is practicable enabling and recognising the holistic approach to safety and the mutual benefits to work and non-work safety that this brings.</p>
15	<i>Incentives in improving workplace H&S outcomes</i>	<p>The HSE Act provides penalties for non-compliance with the Act, and provides levels of penalty depending on the origin of the failure.</p> <p>The discussion paper provides comment on penalties and incentives, including considering higher penalties and offences for directors and senior managers.</p> <p>The EEA proposes that smarter combinations of penalties and incentives may motivate better quality inputs by directors and senior managers. For example, graduating maximum penalty range downwards against on-going proof of effective and correspondingly improving systems may motivate these leaders to continually strive for operational excellence. Conversely, poorer systems would equate to higher available fine ceilings, providing a disincentive for lax inputs at leader level.</p> <p>The EEA suggests ideas for improving workplace safety outcomes through incentives in submissions to Q16 below.</p>

16	<i>Incentives</i>	<p><u><i>Incentives – General Comment</i></u></p> <p>New Zealand's workplace accident history and the massive national economic cost of existing incentives, support the view that current programmes are weak. Experience rating is unlikely to stem the tide if we persist as we have over the past decades.</p> <p>The EEA believes that part of the reason we have got to where we are is that the shared accountability principle under the ACC scheme is very effective at extending cover for rapid and reasonable compensation for harm. The down-side is that shared accountability does not sheet home a strong enough sense of responsibility to fix the problems that gave rise to the harm in the first place. This of course is compounded by what is perceived as the risk tolerant No8 wire she'll be right, can-do mentality that seems to pervade some parts of the work-force. This is also compounded by the low probability of inspector visit, low conviction rate and low average penalty. The overall message is that enforcement sits well with our national culture and character. Of course these are generalised observations for the benefit of suggesting other possible incentives for consideration by the Taskforce. Many of New Zealand industry sectors are making great inroads to safety improvement, whether to meet compliance standards or to move beyond these, as in the ESI where safety is intrinsic to every work activity.</p> <p>The EEA suggests that stronger incentives are needed, with appropriate support for change. New approaches need to be considered. Any new incentives need to be assessed for the potential to induce perverse board, management, worker, contractor/sub-contractor, and / or supplier behaviours.</p> <p><u><i>Incentives Principles</i></u></p> <p>The EEA suggests that principles for determining incentives need to be clearly defined. For example, incentives need to convey a message that New Zealand is having a radical change, unsafe behaviour at any level is unacceptable, and, positively, that great safety is really excellent for business, society and the economy.</p>
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		<ul style="list-style-type: none"> • For business owners, incentives need to make safety and health just as much an important item on their radar as any other major business risk. • Incentives need to promote change to excellence, not mere compliance. • For employees, incentives should make it totally unacceptable to be unsafe, and the incentives should be soon, certain, and very personal where they own significant culpability. • Where performance of any undertaking is below an acceptable standard, incentives to make the change should be compelling; as far as possible the performance indicators during the improvement phase should focus evenly on change inputs and outputs, and the performance indicators should derive information from all parties involved in the change journey, including employees of the undertaking as they wear the effects. <p><i><u>Incentives Recommended for Consideration</u></i></p> <p>Some suggested ideas on incentives that the Taskforce may consider. They may at least seed other thinking or contribute to improving incentives for better safety performance.</p> <p><i><u>Experience Rating</u></i></p> <p>The EEA submits that blending and counting additional metrics into the experience rating (ER) formula and weighting these against levy incentives should make the experience rating more relevant and effective in motivating improvement. For example metrics fed into experience rating ought to take account of management inputs that positively impact safety. (The safety case criteria recommended under Part 3 section 20 below in this submission provide some guideline around the sorts of positive input metrics that could be adapted for this purpose, and so drive desirable management response to levy 'penalties'). Metrics on outputs that include employee perceptions about their safety experience, injury</p>
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		<p>management and rehabilitation etc. should also be fed into the ER mix.</p> <p>Consideration should be given to an ER mix that impacts business fortunes on a progressively upwards sliding scale if the metrics continue to indicate unwillingness to embark on the change journey, as reflected by changes in metrics from benchmark at the outset of the improvement process.</p> <p><i>Employee conformance and accountability</i></p> <p>The EEA recommends that legislative reform introduces better balance and accountability into the mix for employee conformance to workplace safety requirements. The EEA recommends that clear criteria be set under which employees that deliberately violate safety rules and requirements, are automatically penalised for the deliberate violation. This should apply where the employer has taken reasonable steps in the circumstances and the employee took an unreasonable decision to make the violation. This should apply even if the employer is still held vicariously responsible in some degree for the harm suffered through the employee risk-taking. But it should not apply for violations other than those that are deliberate. Other unintentional violations inevitably have systemic causes for which employees should not be held responsible. This more balanced approach applied consistently under a set of known rules and criteria, would send a message to employees that the crown will not tolerate deliberate violations on their part. The EEA submits that this approach should help improve employee accountability and motivation for their choices and behaviours at work.</p> <p><i>Corporate Manslaughter</i></p> <p>The EEA is supportive of stronger governance and leadership as keys to improving workplace safety performance; however, the EEA is not supportive of corporate manslaughter liability per se as an incentive to achieve this. The EEA is concerned that corporate manslaughter liability could drive avoidance strategies that detract from the</p>
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		<p>Strategic Review goal of significantly improving safety. Liability at director and senior management levels for items directly controllable by them is appropriate. To this end, the Strategic Review should better inform and enable governance and leadership roles and participation whether for major hazard, significant hazard or SME undertakings. Such incentives should be structured to motivate continual improvement towards operational excellence, beyond mere compliance.</p> <p>Part 2 of this submission recommends a suitable regulatory regime for self-managing safety. Part 2 also outlines ways to improve director and leader participation. Part 3 section 20 below itemises director and leader inputs as applicable to major hazard undertakings such as mines and refineries specifically. Directors and leaders of major hazard undertakings should be held accountable for the quality and effectiveness of these inputs. The EEA submits that adapting and including these criteria for director and leader inputs down through improved Safety Management System specifications for self-managed medium hazard undertakings (such as the ESI), and codifying these for SME directors and leaders would provide the standards suitable for director and leader accountability across these categories also.</p> <p><u><i>Other alternative incentive ideas for consideration</i></u></p> <p>The Taskforce may consider other behavioural incentives that fit with the idea of motivating culture change where the positive approach is not working. The EEA suggest that the Taskforce explore other campaigns and the success factors for the global behaviour changes that these have wrought. Examples include anti-smoking, seat belt use and drink-driving. But any adaptation of these sorts of approaches needs to fit within the business context and the plethora of legislative constraints.</p> <p>For these suggestions, the underlying principle is along the lines (as with drink-driving): if you get caught, there will be consequences.</p>
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		<p>Possible ideas include:</p> <p>Public disclosure: The health and safety performance of companies are publicly disclosed in annual reports and/or through publically accessible data bases. Commendations celebrating their improvement journey when it happens are also publicised. Public disclosure of safety performance should be one metric prospective employee's consider when job-hunting in a market that competes for skilled employees.</p> <p>Fit and proper persons to hold directorships: Consideration should be given to improving director education on health and safety governance, and excluding/removing directors who demonstrate inappropriate health and safety governance.</p> <p>Tell my story and appeal to you: Encourage directors, persons in control, culpable persons and company representative's to undertake site visits and report their experience to forums and audiences, to get the message out about the importance of safety behaviours at all levels. Positive reinforcement may be that they carry out such tours once performance issues are resolved, to tell the story about why and how they changed, and the benefits they, or their business have realised through improving.</p> <p>The sorts of incentives suggested above for consideration may well be workable options as add-ons or even alternatives to any court imposed fine.</p> <p><i><u>Penalty certainty as an incentive</u></i></p> <p>Under the shared or community ACC system for compensating personal injury victims, limb and permanent function loss are scheduled to enable assessment of consistent lump sum compensation.</p> <p>There appears to be general consensus that penalty incentives have not kept pace with the intent of parliament or society through successive HSE Act or sentencing reviews.</p> <p>One approach to giving penalty certainty as an incentive may be to schedule automatic fines categorised by injury or harm type and severity, penalty scaled against ability to pay based</p>
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		<p>on annual turnover. Penalties would apply automatically, and be apportioned based on shared or company culpability as appropriate. Penalties would be discountable on a prescribed scale commensurate with proof of due diligence to fit the scale and risk of the undertaking. This approach would be triggered by compulsory reporting of work injury and disease by health providers treating the injured person, minimising risk of report suppression by the undertaking. This approach should focus attention on operational excellence (after all this is offered as a defence). The automatic penalty scale for harm would reflect society sentiments about injury and harm, and would overcome relatively impotent penalties evident to date.</p> <p>The approach outlined above has parallels with speeding cameras in that the speeding vehicle passing the camera automatically triggers the ticket, and it is then up to the individual to defend their position or state any mitigating circumstances. It is also consistent with the drink-drive campaign that has been successful in bringing about some behavioural changes. This approach is consistent with the strict liability under the HSE Act – the fact of the event, not the intent to cause the event, triggers the automatic penalty, and the defence process to mitigate the penalty.</p> <p>In the penalty proposal, all fines should be paid into the agency tasked with providing preventive codes, guidance and other services to undertakings, to support improved due diligence.</p> <p><u><i>National Campaign Strategy</i></u></p> <p>While the above are ideas to promote discussion among the Taskforce, EEA suggests that sharpening up incentives and reaching the target audience, needs to be couched within a national campaign strategy as part of the reform process, as was done for smoking, drink-driving, depression and seat belt use.</p>
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20	<i>Regulating major hazards</i>	<p>The EEA believes that if the Taskforce is addressing major hazard undertakings, the safety case approach may be appropriate, provided that criteria are modified to support governance, leadership, employee engagement and incident learnings. Safety cases, if the chosen option, should be vetted by a qualified and resourced regulator. Provided there is evidence of robust and effective self-management under this approach, the EEA suggests it would then be appropriate to continue with a relatively "low touch" regulatory model for major hazard undertakings. This would be an efficient solution, driving focus on operational excellence, and could be used to recognise good performance. It would also be conducive to applying the reverse onus of proof where the undertaking has legal defence through proving the due diligence they applied to achieve safety case requirements.</p> <p>The EEA supports and promotes responsible self-management in an effective performance-based regulatory environment. It is essential that any modified or new legislation and supporting administration focuses audience attention on achieving operational excellence vs. mere compliance. Operational excellence and compliance should be considered two distinct objectives having potential to drive quite distinct organisational responses. New Zealand must move beyond what it believes is an entrenched compliance mentality if safety is to improve. The regulatory regime must afford the tools and environment to achieve this.</p> <p><i>Recommendation</i></p> <p>The EEA believes that to be consistent, safety case minimum criteria should focus attention on excellence and continual improvement. The criteria should also reflect current available knowledge about major hazard event causes. In this regard the EEA endorses the conclusions from Professor Andrew Hopkins' research into major hazard events. These particularly concern regulatory, governance, organisational and human factors issues underpinning the events. Many of these conclusions are also reinforced by the just-released Commission of Inquiry Report into the Pike River Mining disaster. Incorporating these learnings through the Strategic Review process should, in the EEA's opinion, make a</p>
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		<p>positive difference to future major hazard undertakings safety performance in New Zealand.</p> <p>Referencing the available information mentioned above, the following list illustrates criteria that could be added into safety case requirements, to reflect currently available learnings and to focus attention on excellence and improvement, rather than mere compliance.</p> <p>Additional safety case criteria:</p> <ul style="list-style-type: none"> • Statement of how the safety governance will work in the undertaking, including its performance expectations, measurement and review; • Lead indicators for board-level governance inputs and monitoring; • Statement of board-endorsed company philosophy in applying ALARP principles (assuming New Zealand moves to a risk-based safety regime); • Demonstration of budgeted financial, human and other resources commensurate with achieving the safety case objectives for safe operation; • Lead indicators around senior and line management inputs to process and personal safety, able to direct inputs towards safety case objectives. Safety case criteria should also address inputs necessary to achieve good organisational practices (as determinants of workplace culture and also effective process safety), human factors and effective participation; • Organisational design (proving that the undertaking thinks about independence and impartiality of functional specialist roles and reporting lines vs operational roles); • Process change triggering risk assessment; • Organisational change risk assessment (proving that the undertaking considers and manages safety risks that may arise from any organisational change) • Incentive systems (proving consideration is given to: balancing attention to process and personal safety; understanding and minimising perverse impacts on reporting
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		<p>and measurement);</p> <ul style="list-style-type: none"> • Identifying, reporting and responding to major hazard pre-cursor events or process deviations, and measuring these (acknowledging that most major events are preceded by pre-cursors known about by employees, operator or maintainers usually well before disaster strikes – these should be triggers for response plans) • System for acquiring and implementing learnings about internal and external major hazard events, including pre-cursor events; and (related) • Strategy for improving safety culture including motivation and systems for receiving and responding to upwards feedback and reports from front-line staff. <p>The EEA submits that regulatory enforcement of outcomes to the standard of an over-arching duty of care and also to the performance criteria established under approved safety cases, should positively affect safety performance. This EEA believes that the safety case approach is well aligned with standards for good business, such as the ISO safety, quality and environment series.</p>
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25.1	<i>Data collection mechanisms and statistics – Definition of fatality</i>	<p>The discussion paper identifies that NZ's workplace fatality statistics, for example, are somewhat debateable, with the MBIE figure at about 50 fatalities per year and ACC at about 100 per year.</p> <p>It is essential that a definition is arrived at that results in the same statistics from both sources. Is there an inference from the above statistics that half of the workplace fatalities are never investigated by MBIE?</p> <p>Given the Government's objective of reducing workplace fatalities and serious harm injuries by 25% by 2020, it is essential to know what the starting point is (50 or 100?) and what the results along the way are, otherwise the result cannot be measured and there is no certainty that the target was reached.</p> <p>The statistics also identify those workers of 65 and over, make up over 30% of the fatalities. A simplistic approach would suggest that this is the group that should be targeted for the 25% intended reduction. At the very least, a detailed analysis of the causes and mechanisms of the fatalities is required so that appropriate actions can be identified to target this group.</p> <p>The EEA also notes that road fatalities that occur when a person is 'at work' are not included in workplace fatality statistics. The EEA submits that this is inconsistent with effective measurement of workplace fatality performance.</p> <p><i>Recommendation</i></p> <p>That a clear and consistent measurement of workplace fatalities be established that is agreed to and used by all parties.</p>
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25.2	<i>Data collection mechanisms and statistics – Definition of serious harm</i>	Consultation on the definition of serious harm took place some years ago, but no outcome has ever been published. A definition is essential when measurements are being made.
25.3	<i>Data collection mechanisms and statistics – Classification of occupational origin</i>	<p>The fatal work-related injuries statistics published by ACC classify fatalities into occupation, except that the classification 'not specified' is disproportionately large and distorts the analysis of where fatalities are occurring. For example the 2009 statistics state that there were 123 fatalities of which 46 are 'not specified' for occupation. The next largest occupation sector is 20 from 'trades workers'.</p> <p>In the ACC statistics for 2010 it is not possible to determine if the 29 Pike River fatalities are included.</p> <p>To be meaningful statistical information has to be both accurate and provide sufficient breakdown of its origin to enable targeted actions to the areas of greatest need.</p>

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APPENDIX A – Corporate Members of the Electricity Engineers Association

ABB
Meridian Energy
Orion NZ
PowerNet
Transfield Services
Transpower NZ / Omake Training
TrustPower Ltd
Vector
Wellington Electricity Lines Ltd
Genesis Energy
Northpower
Powerco
Tenix NZ
Unison
UGL (NZ) Ltd
WEL Networks
Alf Downs Street Lighting Ltd
Alpine Energy
Beca Carter Hollings & Ferner / Derceto
Contact Energy
Cuthbert Stewart
Delta Utility Services
EATON Industries
Electricity Ashburton
Electrix
ElectroNet Services
ESITO
ETEL
Horizon Energy Distribution
LineTech Consulting
Mainpower NZ
Marlborough Lines
Mighty River Power
Mitton Electronet
NZ Steel
ScanPower
Schneider Electric
The Lines Company
Todd Corporation
Transfield Worley (NP)
Waipa Networks

APPENDIX B Extract Safety Statistics Project Report To June 2011

Background to this report

Since the EEA Safety Statistics Project (the Project) began collecting data in 2004, the electricity supply industry has continued to show a high level of interest in and commitment to sharing electricity supply workplace injury data, understanding industry performance and comparing performance among peers.

The EEA estimates that data reports for the past two years to 2011 cover close to 96% of Full Time Equivalent (FTE) employees working in electricity supply, up from about 90-92% FTE coverage five years ago.

Close to 100% FTE coverage will be achieved when the larger Generators are able to capture and report their contractor data.

Data collected

Data collected under the Project comprised the number of:

- Lost Time Injuries (LTIs)
- days lost to LTIs
- fatalities
- FTE employees.

Yearly data was collected by the generation, transmission, distribution and retail sectors. Asset owners reported data for their own employees, and also for their contractors' employees where they were engaged in electricity supply work.

Lag and lead indicators

The available injury rates are indicative only of the more serious harm to industry employees. Improved lag indicators are needed to track actual experience. Valid lead indicators are also necessary to drive proactive improvement able to be tracked by matching lag indicators.

The EEA is promoting and supporting expansion of valid lead indication through its Safety Climate Project (SCP). This was successfully piloted among 11 companies in 2010, and since 2011 involves 17 companies across Generation and Distribution. SCP indicators enable user companies to drive proactive improvements towards data-based performance objectives. These cover workplace leadership/culture, and safety systems and practice.

Lag and lead indicators
(continued)

The EEA is also improving industry lag indicators. These will incorporate the United States Occupational Safety and Health Administration (OSHA) standard currently being developed through the Business Leaders' Forum for New Zealand use, and will include public safety indices for this industry. The improved lag indicators will provide a better quality track record for review; they will also enable peer benchmarking internal and external to this industry, based on consistent internationally accepted measures.

Conclusion

The initiatives outlined offer a unique opportunity for individual and collective advancement, as an industry, towards safety excellence, in line with industry strategy for this. The EEA is advancing these plans in 2012, and invites industry participation and support for this.

Data collection

Data reported

Data reported to the EEA Safety Statistics Project covers the eight financial years 2003/4 – 2010/11. The reported data includes the number of:

- Full Time Equivalent Employees (FTEs)
- Lost Time Injuries (i.e. work-related motor vehicle and other work injuries causing time lost of one day/shift or more)
- days lost for these injuries
- number of fatalities.

The data was reported by electricity supply business owners for office and field work associated solely with electricity supply.

Respondents reported by their electricity supply categories (Generation, Transmission, Distribution and Retail), showing data for their own employees and summarised data for their contractors.

Appendix 1: Extract of the EEA Occupational Health and Safety Survey Guidance fully defines the raw data gathered in the surveys for this report.

Performance measures

The reported performance indicators are based on Lost Time Injuries (LTIs) and associated days lost. The indicators are:

- Lost Time Injury Frequency Rate (LTIFR)
- Lost Time Injury Severity Rate (LTISR)
- Average Time Lost Rates (ATLR)

The indicators are for all electricity supply industry employees, both:

- business owner employees, and
- contractor employees.

Lag indicators and their meanings

The reported performance indicators are based on Lost Time Injuries (LTIs) and associated days lost. The indicators comprise:

Indicator	Function	expressed as the...
LTIFR	Indicates the incidence rate for LTIs	number of LTIs per million hours worked.
LTISR	Indicates the severity rate for LTIs	number of days lost from LTIs per million hours worked.
ATLR	A simple indicator of severity	average number of days lost per LTI.

The LTISR severity rate indicator correlates with the LTIFR frequency rate indicator, because both have the common million hour's exposure

as the base for calculating these rates.

The LTISR and ATLR severity rates have 220 days for each fatality added into the calculations for these indicators. This meets a requirement to factor in a measure of greater loss where an injury results in fatality (as opposed to a limited number of days lost from work).

Lead indicators

This report alludes to industry lead indicator developments in the discussion about the Safety Climate Project.

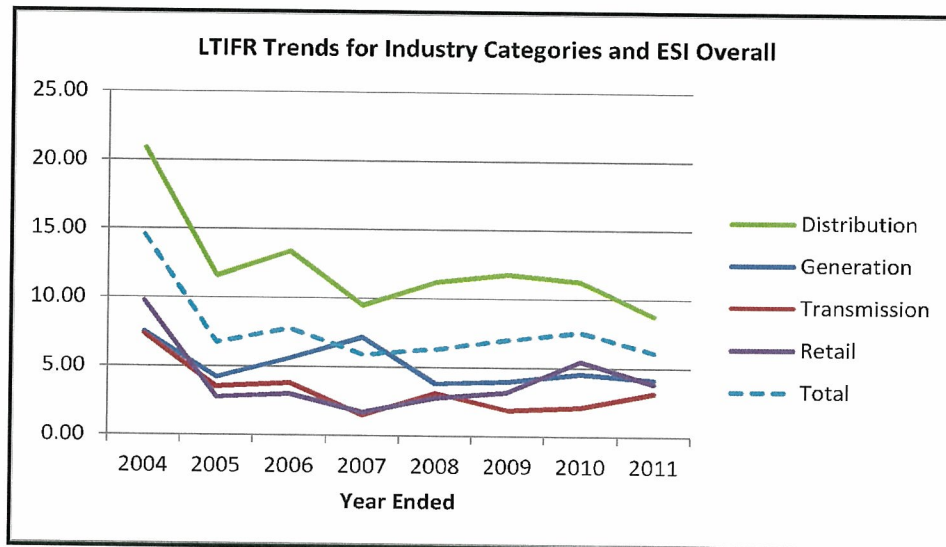
Lost Time Injuries

Table 2 summarises Lost Time Injury (LTI) data submitted to the EEA Safety Statistics Project and available Performance Indicators by sector and industry overall for the year ended June 2011:

Sector	FTE numbers	Fatality numbers	LTI numbers	Days lost	LTIFR	LTISR	ATLR
Generation	1,925.5	0	16	234	4.2	60.8	14.6
Transmission	2,058	1	13	496	3.2	120.5	38.2
Distribution	5,695	1	100	1,554	8.8	136.4	15.5
Retail	2,339	0	18	95	3.9	20.3	5.3
Industry overall	12,017.5	2	147	2,379	6.1	98.9	16.2

Table 2: LTI Data and indicator overview year ending June 2011

Graph 1 indicates the Lost Time Injury Frequency Rate (LTIFR) trend:



Graph 1: Lost Time Injuries per million hours, by sector and total industry, 2004-2011

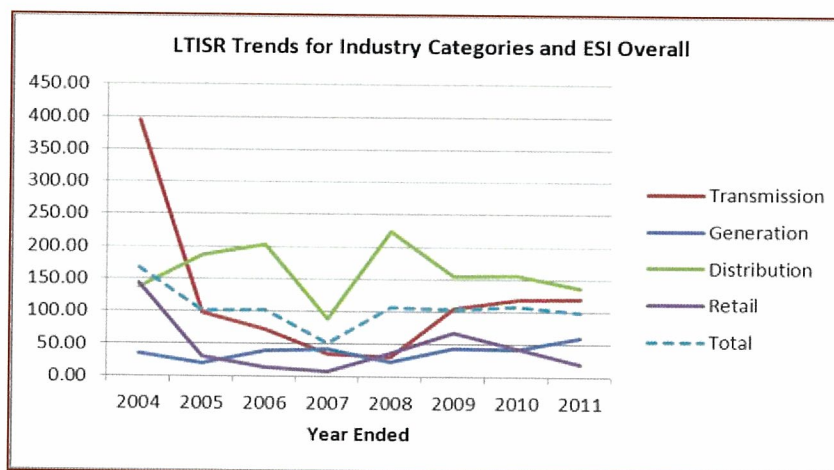
Table 3 correlates annual LTIFR results with the number of Lost Time Injuries for the last four years:

Industry Sector	2007/08		2008/09		2009/10		2010/11	
	Number	LTIFR	Number	LTIFR	Number	LTIFR	Number	LTIFR
Generation	17	3.83	21	3.99	18	4.57	16	4.15
Transmission	8	3.14	5	1.92	7	2.12	13	3.16
Distribution	97	11.20	127	11.78	123	11.25	100	8.78
Retail	18	2.79	19	3.23	26	5.46	18	3.85
Industry overall	140	6.33	172	7.01	174	7.58	147	6.12

Table 3: Number of Lost Time Injuries and LTIFR by sector in the four years to 2010/11

Lost Time Injury severity

Graph 3 indicates the Lost Time Injury Severity Rate (LTISR) trend:



Graph 3: Days lost per million hours, by sector and total industry, 2004-2011

Table 4 correlates annual Lost Time Injury Severity Rate (LTISR) results with the number of days lost due to Lost Time Injury, for the last four years:

Industry Sector	2007/08		2008/09		2009/10		2010/11	
	Days lost	LTISR	Days lost	LTISR	Days lost	LTISR	Days lost	LTISR
Generation	104.0	23.4	231.2	43.9	170.0	43.2	234.0	60.7
Transmission	76.0	29.8	275.0	105.4	396.0	119.7	496.0	120.5
Distribution	1946.1	224.7	1667.0	154.6	1710.2	156.4	1554.0	136.4
Retail	234.5	36.3	397.5	67.6	397.5	43.8	95.0	20.3
Industry overall	2360.6	106.8	2570.7	104.8	2570.7	108.3	2379.0	98.9

Table 4: Number of days lost and LTISR by sector in the four years to 2010/11