

# INSPECTION REPORT

## **The National Grid Company**

**21 January 2002**



ADULT LEARNING  
INSPECTORATE

## Grading

Inspectors use a seven-point scale to summarise their judgements about the quality of learning sessions. The descriptors for the seven grades are:

- *grade 1 - excellent*
- *grade 2 - very good*
- *grade 3 - good*
- *grade 4 - satisfactory*
- *grade 5 - unsatisfactory*
- *grade 6 - poor*
- *grade 7 - very poor.*

Inspectors use a five-point scale to summarise their judgements about the quality of provision in occupational/curriculum areas and in New Deal options. The same scale is used to describe the quality of leadership and management, which includes quality assurance and equality of opportunity. The descriptors for the five grades are:

- *grade 1 - outstanding*
- *grade 2 - good*
- *grade 3 - satisfactory*
- *grade 4 - unsatisfactory*
- *grade 5 - very weak.*

The two grading scales relate to each other as follows:

SEVEN-POINT SCALE	FIVE-POINT SCALE
grade 1	grade 1
grade 2	
grade 3	grade 2
grade 4	grade 3
grade 5	grade 4
grade 6	grade 5
grade 7	

## Adult Learning Inspectorate

The Adult Learning Inspectorate (ALI) was established under the provisions of the *Learning and Skills Act 2000* to bring the inspection of all aspects of adult learning and work-based training within the remit of a single inspectorate. The ALI is responsible for inspecting a wide range of government-funded learning, including:

- work-based training for all people over 16
- provision in further education colleges for people aged 19 and over
- the University for Industry's **learn**direct provision
- adult and community learning
- training given by the Employment Service under the New Deals.

Inspections are carried out in accordance with the *Common Inspection Framework* by teams of full-time inspectors and part-time associate inspectors who have knowledge of, and experience in, the work which they inspect. All providers are invited to nominate a senior member of their staff to participate in the inspection as a team member.

## Inadequate provision

A provider's provision will normally be deemed to be less than adequate where

- one third or more of published grades for occupational/curriculum areas and New Deal options are judged less than satisfactory, or
- leadership and management are judged to be less than satisfactory

The final decision as to whether the provision is inadequate rests with the Chief Inspector of Adult Learning. The overall judgement as to whether the provision is adequate or inadequate is included in the summary section of the inspection report.



## SUMMARY

### The provider

The National Grid Company has an engineering training centre in Eakring, a small village near Newark. It provides training at a working substation in substation operation and maintenance and overhead line erection and maintenance. There are currently 28 advanced modern apprentices. On average, the company recruits 12 learners each year, although the annual intake depends on The National Grid Company's manpower requirements. All of the learners are employed by the company.

### Overall judgement

The quality of the provision is adequate to meet the reasonable needs of those receiving it. The quality of the work-based learning is good and the leadership and management are also good.

### GRADES

Leadership and management	2
Contributory grades:	
Equality of opportunity	2
Quality assurance	3

Engineering, technology & manufacturing	2
Contributory grades:	
Work-based learning for young people	2

### KEY STRENGTHS

- good retention and achievement rates
- excellent resources to support learners
- good off-the-job training
- good strategic and operational management
- good equal opportunities practices

### **KEY WEAKNESSES**

- over-reliance on witness testimony for workplace evidence

### **OTHER IMPROVEMENTS NEEDED**

- more effective use of the data collected during selection and induction

## THE INSPECTION

1. A team of three inspectors spent a total of 12 days at The National Grid Company's (National Grid) training centre during January 2002. They inspected work-based learning in engineering, technology and manufacture. Inspectors also visited two subcontracted colleges. They interviewed 18 learners, and conducted 12 staff interviews and four interviews with subcontractors. Inspectors reviewed a wide range of documents, including learners' files, NVQ and key skills portfolios, external verifier reports, internal verification records, records of meetings, policies and correspondence. Two training sessions were observed. They also studied the company's self-assessment report which was produced in August 2001.

Grades awarded to learning sessions

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Total
Engineering, technology & manufacturing	0	2	0	0	0	0	0	2
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

## THE PROVIDER AS A WHOLE

### Context

2. National Grid transmits electricity in England and Wales. National Grid has substations at over 323 sites and has approximately 3,083 employees. There are network service managers for each of four geographical areas across England and Wales. The technical staff who are responsible for maintaining and servicing the overhead line and substation equipment are allocated to one of these geographical groups.

3. The training centre, in Eakring, Nottinghamshire, covers an area of approximately 200 acres and has an extensive range of background knowledge and practical training resources. Substation operation and maintenance training is provided in a working substation. The overhead line maintenance training resources include several outdoor 'training lines', representing a variety of conductor configurations. There are further workshops for training on cables, scaffolding, rigging and slinging. The Eakring training centre offers a number of training schemes, including the advanced modern apprenticeship in engineering, to employees of National Grid. Three of the nine full-time trainers provide training for the apprenticeship programme. There are eight business, administration and facilities staff.

4. Learners are provided with residential accommodation at the training centre. The recently opened facility has 60 excellent study bedrooms with en-suite facilities, a bar and lounge, a fitness centre and a games room. All meals are provided in a restaurant on the site. National Grid has its own golf course, and other leisure facilities. Minibus transport is provided to nearby towns for evenings out.

### Work-based learning for young people

5. National Grid plans and carries out its on- and off-the-job training effectively. Learners' achievements are good. Most learners complete the programme. The organisation makes good use of its excellent facilities. There are currently 28 learners, all advanced modern apprentices. All are employed by the company and receive full corporate benefits. Progress reviews are regular and effective, and written reports on progress are circulated to all the parties concerned at monthly intervals. Learners complete their framework within the planned time. The co-ordination between the on- and off-the-job training is good. However, there is too much emphasis on witness testimonies in off-the-job training to verify learners' achievements.



## LEADERSHIP AND MANAGEMENT

## Grade 2

6. The National Grid training centre in Eakring is a part of the human resources department of National Grid. The centre manager reports directly to the company's head office in Coventry. Day-to-day responsibility for the advanced modern apprenticeship programme lies with a manager, who co-ordinates the work of two training teams. One team runs the substation training and the other the overhead transmission line training. There are nine trainers and eight administration and facilities support staff. National Grid offers training on a residential block-release basis over a three-year period. The training centre is an NVQ approved assessment centre. The most recent self-assessment report was prepared in August 2001.

### STRENGTHS

- good strategic and operational management
- effective staff appraisals, training and development
- good equal opportunities practices
- effective action-planning

### WEAKNESSES

- some inadequate quality assurance procedures

### OTHER IMPROVEMENTS NEEDED

- better reinforcement of equal opportunities during training

7. The training centre's strategic planning process is clear, well established and understood by staff. An annual business plan is produced which focuses on the needs of the learners. The plan clearly outlines the training aims and objectives. It identifies who is responsible for achieving an objective, as well as the targets and key performance indicators to be used for monitoring progress. Each objective is linked to ISO 9001:2000, an international quality assurance standard, towards which the company is currently working. Progress on achieving objectives is monitored and entered on the plan, as are any additional areas for development. The annual operating plan is used to set individual and team targets. There is a formal meeting structure with comprehensive minutes and action plans. A monthly strategy meeting, which includes all staff, is followed by individual team meetings, at which the operating plan is reviewed. There are regular meetings between managers, instructors, mentors and external organisations to review scheme management, learners' progress and future needs. There is a good exchange of information at all these meetings. Individual targets are agreed annually for learners and staff, and are formally monitored every six months. Management information systems systematically track learners' progress both on and off the job. Learners have short-term targets which relate to the apprenticeship framework.

Learners' achievements are good. There is frequent communication between the centre and subcontractors. A wide range of information is required before subcontractors are accepted onto the register of preferred suppliers.

8. Training and development targets for staff are established through annual performance reviews. These reviews also give rise to performance targets for managers. The extent to which managers achieve their targets forms the basis of their salary review. There is a direct link between staff training and the annual business plan and equal opportunities action plan. During 2001, trainers and managers attended a three-day intensive training event. Staff took part in both formal and informal discussions, lectures, awareness-raising sessions and presentations. A wide range of topics were discussed, from the initial identification of needs to e-learning opportunities. All staff have recently had training in equality of opportunity. The course was commissioned by the company and designed to relate equality of opportunity directly to the workplace and the work of the company. Staff are encouraged to update and enhance their teaching and training skills. Newer staff are given responsibilities which help them to develop their roles. The organisation's learning centres give employees access to a wide range of distance-learning and other training and reference material. The quality and content of internal training is always carefully scrutinised. Each learner is assigned a mentor during their induction to the programme. All mentors attend mentoring skills workshops to help them understand their roles and responsibilities in relation to the learner. Training staff regularly update their practical skills.

**Equality of opportunity****Contributory grade 2**

9. The company gives equality of opportunity a high priority. An action plan, developed by the head of technical training, in consultation with the training centre manager, details short-, medium- and long-term objectives to enhance equality of opportunity and raise awareness of the issue among learners and staff. The plan is monitored regularly and is being put into practice. The plan includes reviews of course material, encouraging staff to use the intranet to raise awareness, and a continuous review cycle to check effectiveness of the systems. National Grid's equal opportunities policy is detailed and explains all relevant legal requirements. Information given to learners is clearly presented and it covers harassment, victimisation and grievance procedures. The equal opportunities policy is reviewed and updated regularly. The importance of equal opportunities is covered in the induction process for new learners. All learners are given the opportunity to progress to higher level qualifications and through the management structure of the company. Training centre staff, mentors and workplace supervisors have all had comprehensive equality of opportunity training. The training was developed specifically for the company by an external consultant. Subcontractors supply a copy of their equal opportunity policies to the centre when they apply for 'preferred supplier' status. All subcontractors are also given a copy of the National Grid's equal opportunities policy and asked to confirm in writing that they understand and will work within the policy guidelines.

10. The company is involved in national and regional initiatives to encourage under-represented groups into engineering. The company closely monitors its own selection and recruitment procedures, policies and practices to ensure that they comply with best practice. Managers are provided with a breakdown of applicants according to gender, race and disability, and corresponding information on applicants who are shortlisted. Managers are taking action to improve the numbers applying and being short-listed from minority groups.

## Quality assurance

## Contributory grade 3

11. A range of quality assurance procedures is in place. Some procedures are operating effectively while others are inadequate. The procedures are currently being developed to meet ISO 9001:2000, a nationally recognised quality assurance system. The quality of training is monitored continuously and action is taken when necessary to improve quality. Evaluation sheets are completed for all aspects of training. Most comments from learners are positive about the quality of the training, and any criticisms are acted upon. Learners completing their training give a presentation outlining their views on the quality of their progress. Notes of key points are recorded and actions are taken to respond to points made. For example, in response to comments from learners, tutorial time was extended from one day to two on the open learning course, to provide better support for the learners. Points raised by an external audit from the National Contracting service were attended to quickly.

12. In a few cases, the procedures for approving a supplier have not been comprehensively followed. Alternative procedures are being developed. In October 2001, an external consultant carried out work to develop a process for observing and assessing learning sessions. Seven sessions were observed and the strengths and areas for development of each were identified. A form for recording judgements on the quality of learning sessions was designed. Further development of the observation process is planned. The auditing of ISO 9001:2000 procedures is being developed.

13. The production of the self-assessment report is not an integral part of the ISO procedures. Nevertheless, the head of technical training, in conjunction with the training centre manager, training centre staff and area staff, developed the current self-assessment report. It was the centre's third self-assessment report. Inspectors felt that it was generally accurate and that many of the issues identified had been rectified through an action plan. Inspectors awarded higher grades than those given in the self-assessment report.

### Good Practice

*As part of the equality of opportunity initiatives, all learning materials and communications materials are regularly reviewed and amended. This is reflected not only in printed materials but also in the content of the company's intranet and Internet pages.*

## AREAS OF LEARNING

Engineering, technology & manufacturing

Grade 2

Programmes inspected	Number of learners	Contributory grade
Work-based learning for young people	28	2

14. The National Grid's advanced modern apprenticeship scheme has been developed specifically for the electricity industry's training association. Learners recruited to the scheme carry out training in installing and maintaining electricity transmission substation plant and apparatus, or erecting and maintaining overhead lines. All learners are employed by an operating unit, under a team leader, in the engineering division of National Grid. The programme consists of off-the-job training at the national training centre at Eakring and on-the-job training at regional locations throughout England and Wales. Learners on the installation and maintenance of plant programme spend 54 weeks at the national training centre during the three-year programme, and the learners on the erection and maintenance of overhead lines spend 43 weeks there. The programmes include training blocks of between two to six weeks. At the training centre, learners develop practical skills and background knowledge. These off-the-job training sessions are carried out by nine trainer/assessors. First- and second-year learners work towards nationally recognised qualifications by following a distance-learning course managed by a subcontracted further education college. During the academic year, learners attend the Eakring training centre for six tutorial days with the college's staff. Learners carry out a series of assignments. They also attend the college for two, one-week blocks. During one of these blocks, learners take external examinations. Fifteen learners are working towards an NVQ in substation plant installation and maintenance at level 3 and 13 learners are working towards a level 3 NVQ in overhead lines installation and maintenance. Learners' performance is reviewed and assessed by the trainer/assessor at the end of each residential block at the training centre. The written review is shared with the learner, their mentor, the workplace supervisor and the contracting area team leader.

The following table shows the achievement and retention rates available up to the time of the inspection.

Work-based learning for young people										
Advanced modern apprenticeships (AMA)										
	1997-98		1998-99		1999-2000		2000-01		2001-02	
	No.	%	No.	%	No.	%	No.	%	No.	%
Number that started	13		21		14		9		8	
Still in training	0	0	1	5	10	71	9	100	8	100
AMA framework completed	12	92	15	71	0	0	0	0	0	0
NVQ level 2 completed	0	0	0	0	0	0	0	0	0	0
NVQ level 3 completed	12	92	15	71	0	0	0	0	0	0
Left without completing the framework	1	8	5	24	4	29	0	0	0	0

## STRENGTHS

- good retention and achievements
- excellent resources to support learners
- excellent individual support
- good off-the-job training

## WEAKNESSES

- lack of integration of key skills with vocational training
- over-reliance on witness testimony for workplace evidence

## OTHER IMPROVEMENTS NEEDED

- more effective use of the data collected during selection and induction
- more accessible evidence for the NVQ

15. Learners are very positive and enthusiastic about their training programme. Retention and achievement rates are good. Eighty-nine learners began training between 1995 and 2001. Seventy-seven learners have either achieved all the objectives of their individual learning plans or are still in training. Eleven learners have left the programme without achieving qualifications, and one learner is being allowed to continue beyond the planned three-year programme to increase his confidence in practical skills. Of the 58 learners who started their apprenticeships between 1995 and 1998, 49 have fulfilled all the objectives in their learning plans, completed the apprenticeship framework and

progressed into employment with National Grid.

16. There are excellent resources for learners. The purpose-built accommodation includes well-equipped classrooms and technical training workshops providing a wide range of equipment, such as primary plant and protection and control equipment, as well as a working training substation. A range of tower structures and strung lines provide good facilities for learners receiving training in overhead line maintenance. Learners can carry out private study, research and revision at learning centres, which are equipped with Internet computer suites and learning packages. Learning texts and video packages are also freely available. Learners are provided with, and allowed to keep, all the tools, engineering and personal safety equipment they need for their training and work activities. The learners are given a detailed manual of the apprenticeship programme and well-produced manuals detailing work procedures and equipment needed. The subcontracted colleges also provide clearly written learning materials to help learners gain additional qualifications. There are nine full-time training staff employed by the provider, of whom three work solely on the apprenticeship programme.

17. The company gives the learners individual support. Each learner has a personal mentor in the workplace who works with them throughout their programme. The mentors are trained in this role at the training centre and are introduced to the learners during the initial induction week. The mentors have usually been learners themselves and so are familiar with the apprenticeship scheme and provide learners with personal support. As part of their distance-learning college course, learners have to complete 45 assignments. The course administrator, at Eakring, keeps track of these and forwards the learners' work to the college for marking. Tutors from the college provide additional tutorial sessions at the learners' request. In one case, the college tutors helped a student who had failed the external tests, so that he was successful at the next attempt. Learners who do not have their own transport are collected from the nearest mainline railway station and brought by taxi to the training centre. Recently opened residential accommodation has 60 good-quality study bedrooms with en-suite facilities. The centre also includes a bar, lounge, fitness centre and games room. All meals are provided in an excellent on-site restaurant. National Grid has its own golf course, fishing lake, and mountain bicycles and computer games are also available for learners to use. Minibus transport is provided to nearby towns for evenings out.

18. The apprenticeship programme is planned well in advance, with blocks of off-the-job and on-the-job training identified on a calendar. The off-the-job blocks are defined in terms of specific theoretical and practical competences necessary to perform the tasks. All learners and trainers are given a modern apprenticeship manual which details the learning objectives for each module. The trainers receive good support from administrative and technical support staff, who ensure that the appropriate resources are available for teaching and training sessions. The support team produces good audio-visual teaching aids and clear copies of the course notes for the learners. The trainers are nationally recognised as experts in their field and act as consultants for other organisations. As well as the framework requirements, the programme includes

opportunities to obtain additional qualifications. The staff at the centre closely monitor learners' performance in the written assignments. Learners attend short courses run by four other subcontractors. These courses provide learners with basic engineering skills, information technology (IT) skills, first aid, and the opportunity to develop team-building skills alongside the skills necessary to support the NVQ.

19. Learners who started their training programme before September 1999 are working towards an apprenticeship framework which does not require a separate key skills qualification. The key skills training has been subcontracted to a further education college for those who started after September 2000, but the collection of evidence on key skills development has been delayed. Key skills are not developed as an integral part of the vocational training. These issues have not prevented any learner from completing the framework. The college plans to make key skills an integral part of the practical assignments for new learners, and assignments have now been prepared which include key skills.

20. First-year learners are issued with NVQ folders. From the start of year two, learners are required to collect evidence of competences gained in the workplace. Learners do not receive continuous assessment in the workplace. Although learners collect evidence progressively in the workplace, they are not assessed until the final year of the training programme. The assessment is carried out by the trainers/assessors at the training centre, who review the entire contents of learners' portfolios of evidence. Learners obtain witness testimonies of their competence in the workplace. Testimonies are in the form of reports signed by a member of staff in the workplace. Witness testimonies lack detail. There is insufficient assessment by direct observation of the learners' performance in the workplace.

21. There is a thorough selection process, which includes skills and aptitude tests. When selected, learners undergo further testing during induction. The results are often not reflected in individual learning plans. All the plans have the same start and completion dates, and do not reflect any variations in individuals' learning needs or the prior achievements of learners.

22. A large amount of evidence is collected on the extent to which learners have developed their competences. The identification and monitoring of this evidence is not always clear. The internal verification procedures are satisfactory. The verifiers sometimes confirm the assessment process without always providing feedback to individual assessors. The procedures are, however, regular and well documented.

#### Good Practice

*Learners are provided with their own laptop computer and email account to enable them to continue their research and studies at all times.*