Skills Development and Staff Retention

Author and Speaker

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Background

The Electricity and Energy Directorate of the Nelson Mandela Bay Municipality, has embraced a culture of learning by introducing key educating principles that are effective in developing, recruiting and retaining staff. It is as a result of this environment and the opportunities afforded to that I am able to comment positively on the rich returns in human capital investment.

The Chinese proverb, "Grow a tree for ten years; grow men for a hundred" is true in that nurturing and educating human talent is the key to prosperity.

This paper has therefore been written with the aim of promoting skills retention strategies and the development of engineering personnel as one of the key components for the industry to remain effective in its core functions, such as maintaining quality of supplies and service delivery.

Introduction

The questions that employers should be asking about skills development are:

What effect does it have on performance? What priority should it have? Is it an expense or an investment? How can it be effectively implemented in practice?

This paper endeavours to contribute, make suggestions and answer these questions by exploring the following:

1.   the Far East's philosophy on Skills Development;
2.   statistics clarifying the impact of skill shortages and staff turnover on a country or organization;
3.   practical mechanisms that are effective in developing engineering personnel.

The Far East's philosophy on Skills Development

The following facts are extracted from a report by Dieter Kusel, the former CEO of East Cape Training Centre, an institution accredited internationally for its quality of training offered. It compares the training approach in Hong Kong, Singapore and Taiwan with that in South Africa:

1. In the Far East, the government, industry, commerce, and private people themselves, are totally committed to training as a life long exercise in continued upgrading and development.

2. Training is viewed by all as an investment in the only abundant natural resource– their people!

3. The right to be trained is embodied in their constitution and is seen as an expression of people's strength. The more they are trained the more they consider their development of strength, ability and expertise.

4. The training is not only practical in nature, but is a full and total education system, involving personal and vocational guidance, counselling, moral and social education as well as community involvement.

5. To ensure that only the highest standards are taught and maintained, regular national and international competitions are held where co-operation and exchange programmes for trainees and instructors alike are encouraged at international level as a standard procedure.

6. Training Centres operate virtually around the clock, utilizing double shift methods, after hours and week-end training, thus catering for both the unemployed and employed. Only the latest state of the art equipment and facilities are utilized. This results in around 20% of the population being in permanent full-time training, excluding local in-service and normal education systems.

The official training policy of the Far East could be summarised as follows: The right to be trained, and trained free, to the highest limit of each individual's ability, is a standard mandate given to every public and private organisation. This is coupled to the total desire of each individual to absorb all the training possible, without abusing the privilege, in order to increase their personal strength, standing and ability and has made training a totally cost-effective exercise in human capital, repaying its investment many times.

This has transformed the Far East into an exceptional area of phenomenal growth, low inflation with some of the highest productivity internationally. It is considered one of the best places in the world in which to invest and do business. An enviable record!

A learning culture that the Far East has embraced can be defined as follows:

"The essence of organisational learning is the organization's ability to use the amazing mental capacity of all its members to create the kind of processes that will improve its own." (Nancy Dixon 1994)

"A Learning Company is an organisation that facilitates the learning of all its members and continually transforms itself." (M. Pedler, J. Burgoyne and Tom Boydell, 1991)

"Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together." (Peter Senge, 1990)

These findings and definitions provoke the need to inculcate a culture of learning to succeed in skills development and as a result provide sufficient engineering skills to the industry.

Statistics highlighting the impact of skill shortages and staff turnover on a country or organization

The following has been summarized in this respect:

Skills Lost to South Africa

It has been commonly recognized and accepted that value is added to organizations primarily through people and information and not, as was thought in the past, through the four M's: money, man, machinery and materials. The statistics below, published by Statistics South Africa, indicate a net loss of technical skills to South Africa during the indicated period.

- The Immigration and Emigration statistics below indicate the net loss of economically active Professionals, Engineers, Technicians, Architects and related occupations to South Africa.

(The figures within the brackets indicate immigration minus emigration data.)

- 2001 = -6638 (953 -7591)
- 2002 = -6280 (1054 -7334)
- 2003 = -9529 (1011 -10540)

Submission of immigration data is obligatory and the figures are therefore considered reliable. Emigration data however, is less reliable as some emigrants do not complete paperwork or are not specific as to their intentions. The above statistics are therefore conservative and the net losses are probably greater. The documented total emigrants was 25 465 for the years 2001 to 2003.

The financial implications for the country reaches into the billions.

Staff Turnover and its Financial Impact

Research in the UK indicates that staff turnover by 2012 would have cost businesses at least £6,2 billion and these unacceptable levels of turnover impact significantly on employer finances. This negative impact can primarily be attributed to skill shortages and as a result the demotivation of existing staff.

Why Do People Leave Their Employer?

Research suggests that in response to the question of why people leave, employers answer "Money", whereas employees rate other factors more highly such as:

- Career Development

- Unresolved problems

- Working Hours

- Staff shortages

Although career development is a key contributor to staff retention, the employer should remain positive in providing competitive packages and possibly scarce skills allowances to staff members.

In summary:

- there have been unacceptable levels of skills leaving South Africa particularly in the engineering industry;

- employer's should focus their efforts on establishing systems that would discourage high levels of staff turnover, maximise potential profits and promote effectiveness in core functions;

- if employees are nurtured and made to feel that their career development is important to the employer then they will tend to remain loyal to their employer.

From these findings it is clear that skills development contributes significantly to the success of an organisation and country.

An increase in effectiveness and an upgraded economy can be achieved by overcoming the abovementioned obstacles if employers create a non-threatening culture of learning that is packaged by an organisational structure resourced to effectively apply skills development practises, like mentoring and lecturing. Ultimately a collective effort from industry stakeholders can reduce the skill losses to South Africa and make this industry attractive.

Mechanisms that Develop Staff

1. A healthy Organogram or Structure that incorporates skills development by providing:

- **Sufficient Trainer Capacity**

  As a general statement, most members of staff, in fulfilling their job descriptions, would not have enough time to train to the extent that a training officer or assigned mentor could. In keeping with the ethos of a learning company, however, all staff can educate by example and demonstration in their day-to-day functions. A fully equipped training centre with trainers, mentors and equipment can supplement the above, especially for artisan training. For technicians and engineers, however, assigned mentors would be advised to fulfil or facilitate such a role. Ideally the mentors should have an understanding of the environment and be suitably trusted advisors. A good choice would be recently retired or experienced ex staff. I am aware that the Engineering Council of South Africa, ECSA, has a list of approved mentors who could be approached as well. The principle is to offer all staff an opportunity to grow and develop in offering a structure that has sufficient training capacity to meet these needs.

- **Training Policies and Skills Development Objectives**

  In keeping with a holistic approach, and to ensure that no-one is overlooked, each section should have a training policy and a set of skills development objectives. The policy can include guidelines like increasing effectiveness of staff, updates on new technology, etc. The objectives should outline the basic functions that staff are required to effectively fulfil within a given section. In addition, the list can include skills like management principles, which provide extra opportunities for staff in broadening their careers. If the above exists, it is convenient to circulate inexperienced personnel through the different sections, within a set timeframe, to gain an overall technical knowledge as to the institution's core functions.

- **Training as per the requirements of the Engineering Council of South Africa**

  It is imperative that the development of engineers and technicians is in accordance with the criteria of ECSA in keeping with the industry standards. The training and development of personnel should therefore tie in with the requirements of ECSA. The advantage of this approach is that personnel are led into an easy registering process with ECSA. It was very helpful when one of the ECSA employees and members visited us with a presentation on what is being offered by ECSA and the processes involved in registering.

- **A Large Resource-Pool of Trainees**

  It is always worthwhile to have graduates incorporated into the system in order to reduce workloads and to introduce fresh ideas taught in the tertiary institutions. A strong recruiting process needs to be in place in order to maintain the number of trainees required.

  We utilize the following vehicles offered by the Human Resources Directorate:

  o Experiential Trainees – those requiring practical experience in completing their qualifications
  o Volunteers - those seeking experience within the engineering field
  o Unemployed Graduates - those who have completed their qualifications and are unemployed
  o Bursary Students - a sponsored education with a contracted work-off period
  o Agency employed staff

  In addition, the Department of Minerals and Energy sponsor trainees at their expense. It is necessary to develop a healthy relationship with the tertiary institutions in order to recruit the graduates that are best suited to make use of the above opportunities.

  The employer can manage staff turnover by having a nucleus of trainees as potential candidates for positions as and when they become available. Trainees that are not absorbed by the employer are marketable within the industry because of the experienced gained. The employer thus fulfils a social role for the country.

- **Administration**

  Proper administration is necessary for the accurate keeping of a record of each trainee's progress. For example having a completed attendance register from every training session fed into a training database is essential. This also facilitates claiming for financial rebates for staff skills development.

The following pointers are being applied within the Projects Sub-Directorate, a team of mainly engineers and technicians within the Electricity and Energy Directorate:

2. Lectures and Practical Training on Engineering Fundamentals

If you do the basics well, you are set to consistently achieve!

Every Friday and Monday time is set aside for lectures and practical training with the aim of equipping staff with the fundamentals of electrical engineering, life skills and general topics such as telephone skills. The practical sessions are constructive in making clear the topics taught on the Fridays. The lecturer's notes are stored electronically and made available to all staff. In addition, the trainees work alongside more experienced staff and as a result gain further understanding of what is being taught. Confidence is also instilled in the trainees by delegating projects for them to manage, providing them with a sense of fulfilment. Fulfilment is also experienced by the trainer, as there is now evidence of competent skills being developed.

3. Lectures and Practical Training on General Engineering Practices

Training is also conducted every Wednesday with the aim of building onto the fundamentals, thus increasing the effectiveness of staff in their present positions. These sessions are open to all staff but are primarily geared to the more experienced staff. The format varies from time to time and there may be sessions of a brainstorming nature encouraging teamwork in overcoming the day-to-day obstacles. A variety of topics are taught and interaction is encouraged. These topics can range from technical to general in nature. The technical lectures include topics such as protection, reticulation designs, transformer A and B values, planning principles, etc. The general lectures include topics such as management practices, financial planning, GIS mapping, renewable energy, etc. In addition, staff are given opportunities to present topics themselves and outside speakers are invited to impart their skills on topics that are industry related such as switchgear manufacturing, etc.

4. Ongoing Professional Training

In keeping with ECSA's requirements to provide staff with continuous professional development points, relevant courses are arranged with accredited training providers. An adequate budget is approved and a schedule of courses is created that would benefit the staff by expanding their knowledge and expertise.

5. Assessments

In order to determine if there is progress in the development of staff, assessments are crucial as a measuring tool. The assessment should include the evaluation of technical requirements, performance and potential in order to determine the overall performance of the staff member. See the Annexure below in this regard which relates to a Planning Environment.

6. Human Resource Management

Much can be said on this topic and it can never be underestimated as a key component in keeping staff satisfied and motivated. Issues like salaries being paid on time and contracts being renewed timeously are crucial in keeping staff motivated. If managers and mentors stay committed to principles like these and act quickly when needs arise, loyalty is cultivated between employee and employer, reducing staff turnover.

7. Research and Special Projects

A great way to keep staff stimulated and innovative is to expose them to new skills, such as involving them in renewable energy projects and research.
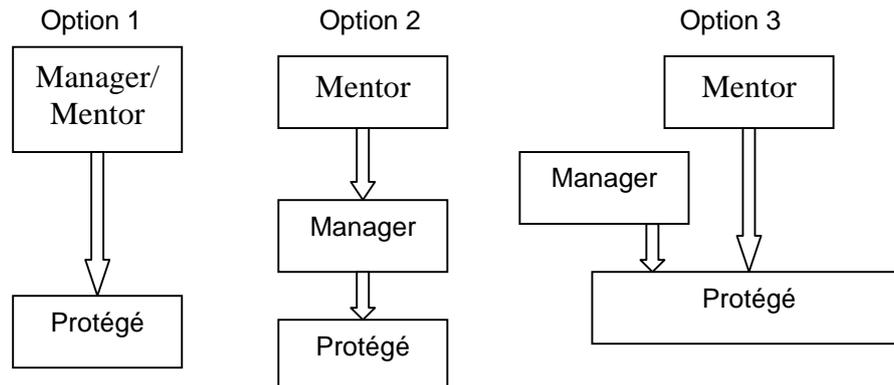
8. Team Building

Team building on a regular basis, at least once a month, develops camaraderie and allows people to have fun. It's a great way to build friendships, strengthen teams and create a better atmosphere to work in.

9.   Mentoring and Mentoring Contracts

The addition of designated mentors in the working environment, as a component for people development, has revolutionized the way training is done. It facilitates a more one-on-one and detailed approach in the development of staff, creating a professional environment in which to work. Managers can now partner with Mentors in establishing staff competency and, as a result, Managers have a reduced training load. With the efforts of the Manager and Mentor, the company skill levels can increase at a faster rate. It is therefore important to incorporate mentors within the system or structure.

If mentors form part of the structure, the following three options can be applied:

Option 1	Option 2	Option 3
Manager/Mentor → Protégé	Mentor → Manager → Protégé	Mentor → Protégé, Manager → Protégé

Option 3 is preferred in maximising the training process by gaining the assistance of a mentor.

Mentoring, as far as possible, should aim to produce the complete staff member by facilitating training that imparts the necessary technical expertise required for a given job description and opportunities for growth in the following attributes determined by research as the key areas that businesses seek:

o   Try to do their work well
o   Set priorities
o   Work well under pressure
o   Can solve problems
o   Can make decisions
o   Work well with others
o   Can communicate with others
o   Know how to learn

87,5% of the people who are able to retain jobs do so because of these qualities. Only 12% are retained because of their skills.

Mentoring is a key component to skills development

"The successful application of the mentoring process implies a host of benefits for both the organisation and the core participants, i.e. mentor and protégé. In accelerating the growth process of the protégé, the mentor himself experiences a substantial growth process, while the organisation adds new levels of expertise and productivity to its human resources balance sheet. The benefits of the process are substantial but they will not be optimised unless the organisation incorporates mentoring as a mainstream issue within corporate strategy." (Nasser, M. 1987)

Mentoring can be defined as:

"A mentor is a kind of a guide who, having been far enough to know something of what's down the path, comes back to walk with you and thus leads without leaving you to follow." (Boyd H.A. 1989)

It is the process of guiding and facilitating a less experienced person to achieve personal and professional growth. Mentors train, coach and provide support by sharing their experiences and knowledge with the protégé.

The benefits of mentoring are:

o   increased productivity and improved work ethics
o   transferred skills and the development of future leaders
o   accurate selection of talent and placement
o   opportunities for plateaued managers to grow and be challenged
o   reduced staff turnover

The role of the mentor:

o   advocate or opportunity provider;
o   interpreter – helps understand the broader purpose of the organisation;
o   learning consultant – audits and advises learning goals;
o   coach – transfers skills or competences with the aim of improving performance: on the job training, defining aim, problem solving, target setting, planning some experiences and monitoring;counsellor – talk through issues and allow for problem-solving;
o   guide;
o   ally – friend;
o   catalyst – inspires.

The mentor cannot impose a relationship with the protégé but can offer a process of development, which can be documented as shown below:

ANNEXURE A
MENTOR AND PROTÉGÉ AGREEMENT

MENTOR: **PROTÉGÉ:**

PURPOSE 1:   TO DETERMINE THE PROTÉGÉ'S VISION.

PURPOSE 2:   TO ESTABLISH THE LEVEL OF COMPETENCE.

PURPOSE 3:   CLARIFY   THE   GROWTH   AND   EQUIPPING   NECESSARY   TO FULFIL THE PERSONAL VISION.

PURPOSE 4:   TO MEASURE PROGRESS TOWARDS FULFILLING THE PERSONAL VISION.

VISION TO BE ACHIEVED:
Discuss and list desires or dreams. Create a Vision.
……………………………………………………………………….
……………………………………………………………………….

DETERMINE THE LEVEL OF COMPETENCE RELATING TO THE VISION:
Define the obstacles, shortcomings and lack of skills that must be overcome to fulfil the vision. Confirm or modify the vision if necessary.
……………………………………………………………………….

DEVELOPMENT PLAN:
Discuss and list what must be put in place to overcome the obstacles, shortcomings and lack of skills.
………………………………………………………………………………..
………………………………………………………………………………..

LIST THE GOALS, WITH TIMEFRAMES, TO BE ACHIEVED IN EACH OF THE PHASES OF THE DEVELOPMENT PLAN:
Discuss and list the entries for a schedule that embraces the key steps needed to implement the Development Plan and enable the protégé to fulfil the vision.

ESTABLISH HOW THE PROTÉGÉ'S PROGRESS TOWARD THE GOALS WILL BE MEASURED:
………………………………………………………………………………..
………………………………………………………………………………..
GENERAL:
………………………………………………………………………………..
SCHEDULE OF MEETING DATES:
Decide on a regular meeting time and dates that will nurse the abovementioned process to completion.

MEETING TIME:

MEETING DATES:

1. …………………………... 2. ………………………….

3. …………………………... 4. ………………………….

THE ACTION PLAN WITH REFERENCE TO ANEXURE A:

MENTOR AND PROTÉGÉ AGREEMENT

MEETING DATE:

MENTOR: **PROTÉGÉ:**
REVIEW THE LIST OF GOALS AND TIMEFRAMES STATED IN ANNEXURE A:
………………………………………………………………………………..
………………………………………………………………………………..

MEASURE THE PROTÉGÉ'S PROGRESS TOWARD THE VISION SINCE THE LAST MEETING:
………………………………………………………………………………..
………………………………………………………………………………..

LIST THE PROGRESS EXPECTED BY THE NEXT MEETING
………………………………………………………………………………..
………………………………………………………………………………..

GENERAL
………………………………………………………………………………..
………………………………………………………………………………..

DATE OF NEXT MEETING:

Conclusion

What effect does skills development have on performance? A positive effect if properly implemented.

What priority should it have? A high priority as it has significant bearing on productivity.

Is it an expense or an investment? An investment, as the returns are great, because of reduced staff turnover.

How practically can it be effectively implemented? As described in the report.

The task may seem great but it is interesting to know that South Africa makes up 6% of the population of Africa and is the most significant contributor to the economy of Africa. Dynamite comes in small packages! Building with excellence and resilience ensures success!

One of our trainees decided to leave the directorate in response to employment offered by a similar and bigger employer for a better salary. This trainee, after a very short period, resigned and returned because he felt his career had greater potential and that his talents would prosper more being in an environment of learning. Surely these types of testimonies are what the industry needs!

Credits

Ex Executive Director of the Electricity and Energy Directorate: George Ferreira, in being innovative by implementing Mentoring Contracts and the continued support given by the Acting Executive Director, Richard Harris, together with their staff.

Director: Projects, Peter Neilson, for the support and confidence shown.

Mentor: Mike Roote, for the significant contributions made in skills development and the relevant training structures implemented within the Projects Sub-Directorate.

Planning Engineers: Tyronne Ferndale, Kevin Beme and Denis Johns for the contributions and support given in the day-to-day functions of mentoring and training.

Support and Contributions made by:

Projects Engineer, Paul Gerber
Electrification Engineer, Elwyn Williams
GIS Manager, Tiger Pather
Administration: Hanlie Junius and Pauline Veitch
Director: Technical, Stephen Adams
Training Manager, Johan Scheepers

Pictures by Keith Piers

References

THE FAR EAST and Their Approach to Training by Dieter Kusel

The NMMU Business School on the Philosophies of Mentoring

The Department of Statistics South Africa

Annexure

STAFF ASSESSMENT

Employee's Name	Employee's Staff No
Position	Period in this Position
Date of Review	
Review Period (From)	(To)

FACTORS UNDER REVIEW	ACTUAL PERFORMANCE
List briefly the main duties and responsibilities, plus objectives previously agreed between the Supervisor and Employee	Indicate the employee's actual performance on each factor under review and suggest how s/he can improve performance

EVALUATION OF PERFORMANCE	Does not Meet Requirements	Meets Requirements	Exceeds Requirements
Job Knowledge How well does the employee know the requirements of the job?			
Quantity of Work What volumes of acceptable work does the employee produce in relation to the normal expectation for this job?			
Quality of Work Does the employee consistently produce:			
(i) Accurate work			
(ii) Neat work			
(iii) Thorough work			
Co-operation How well does the employee co-operate with			
(i) His/her colleagues			
(ii) His/her immediate supervisor			
(iii) Employees from other Sub-Directorates			
Willingness Willingness to undertake tasks			
Attendance			
(i) Punctuality			
(ii) Attendance			
If not satisfactory, please explain:			

EVALUATION OF TECHNICAL REQUIREMENTS	Does not Meet Requirements	Meets Requirements	Exceeds Requirements
Long Term Planning			
Develops new technical staff by advising and mentoring on specific projects			
Reads reports, agendas and minutes to inform himself of proposed long term developments			
Maintains contact with internal and external agencies to inform himself of proposed long term developments			
Forecasts and obtains approval for long term area loads in the urban and rural areas			
Forecasts and obtains approval for long term customer loads in the urban and rural areas			
Develops and maintains long term master plans for the HV network			
Develops and maintains long term master plans for the MV and LV networks			
Contributes to policy formulation			
Medium Term Planning			
Analyses Annual Load Test Data			
Compiles Annual Load Test Report			
Publishes Annual Load Test Report			
Monitors the electrical network and identifies problems in the urban areas			
Monitors the electrical network and identifies problems in the rural areas			
Forecasts and obtains approval for medium term substation loads			
Defines problems, investigates, costs and reports on solutions for the HV network			
Defines problems, investigates, costs and reports on solutions for the MV network in the urban area			
Defines problems and investigates, costs and reports on solutions for the MV network in the rural area			
Contributes to the preparation of the Capital Budget and Programme			
Contributes to the preparation of the Operating Budget			
Prepares documentation to hand over projects to the Transmission Division			
Short Term Planning			
Manages enquiries from Commercial and Industrial Customers in the urban areas			
Manages enquiries from Multiple Domestic Township Developers in the urban areas			
Manages enquiries from Commercial and Industrial Customers in the rural areas			
Manages enquiries from Multiple Domestic Township Developers in the rural areas			
Designs and costs MV and LV reticulation and interprets policy to quote Industrial customers in the urban areas			
Designs and costs MV and LV reticulation and interprets policy to quote Domestic Township Developers in the urban areas			
Designs and costs MV and LV reticulation and interprets policy to quote Industrial Customers in the rural areas			
Designs and costs MV and LV reticulation and interprets policy to quote Domestic Township Developers in the rural areas			
Manages and controls expenditure on all projects under his control			
Liaises with consultants and contractors			
Prepares and issues specifications			
Adjudicates tenders			
Organises and prepares agendas for site meetings			
Investigates, costs and comments on circulars from the I&E Directorate regarding Subdivisions			
Investigates, costs and comments on circulars from the I&E Directorate regarding Land Matters			
Investigates, costs and comments on circulars from the I&E Directorate regarding Sectional Title Applications			
Investigates, costs and comments on circulars from the I&E Directorate regarding Endorsement Diagrams			
Monitors productivity against set targets			
Compiles Monthly Progress Reports			
Contributes to Divisional Management Meetings			

General			
Performs Load Flow Analysis of the HV network			
Performs Fault Level Analysis of the HV network			
Performs Load Flow Analysis of the MV network			
Performs Fault Level Analysis of the MV network			
Develops and maintains Planning Database			
Database and Cost Estimating Programs			
Contributes to Planning Database and Cost Estimating Programs			

EVALUATION OF POTENTIAL **Discuss and appraise any of the following factors:**	Does not Meet Requirements	Meets Requirements	Exceeds Requirements
Leadership			
Does the employee show ability or potential to take charge of a situation and direct and control group activities in a constructive way.			
Analytical Ability			
Does the employee analyse problems into manageable pieces for logical sequence of handling?			
Judgement			
Does the employee show foresight usually arriving at clear, well-balanced conclusions?			
Initiative			
Does the employee anticipate needs, start action, assume responsibility?			
Creativity			
Does the employee conceive new ideas and then put them into practice?			
Presentation of Ideas			
Does the employee present his ideas clearly and forcefully, either verbally or in writing?			

OVERALL PERFORMANCE	Does not Meet Requirements	Meets Requirements	Exceeds Requirements
(All employees)			
Your assessment should be based on the importance of the preceding ratings in this employee's work and not the average of these ratings.			

ACTION TO IMPROVE PERFORMANCE

(Indicate also specific training necessary to help the employee improve performance.)

Appraised by: **Reviewed by:**
(Supervisor)   **(Executive Director/Director)**

Position: **Date:**   **Position:**
        Date:

EMPLOYEE'S COMMENTS

Employee's Signature: **Date:**

(NOTE: Your signature does not imply your agreement with the review, merely that the review has been discussed with you.