

Strategic Overview and Scrutiny Panel

Grand Jury Room, Town Hall
5 May 2009 at 6:00pm

Strategic Overview and Scrutiny Panel deals with reviewing corporate strategies within the Council's Strategic Plan, the Council's budgetary guidelines for the forthcoming year, scrutinising the Forward Plan, the performance of Portfolio Holders and scrutiny of Cabinet decisions or Cabinet Member decisions (with delegated power) which have been called in.

Information for Members of the Public

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The Council values contributions from members of the public. Under the Council's Have Your Say! policy you can ask questions or express a view to meetings, with the exception of Standards Committee meetings. If you wish to speak at a meeting or wish to find out more, please pick up the leaflet called "Have Your Say" at Council offices and at www.colchester.gov.uk.

Private Sessions

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Terms of Reference

Strategic Overview and Scrutiny Panel

- To review corporate strategies
- To ensure the actions of the Cabinet accord with the policies and budget of the Council
- To monitor and scrutinise the financial performance of the Council, and make recommendations to the Cabinet particularly in relation to annual revenue and capital guidelines, bids and submissions
- To link the Council's spending proposals to the policy priorities and review progress towards achieving those priorities against the Strategic / Action Plans
- To scrutinise executive decisions made by Cabinet and the East Essex Area Waste Management Joint Committee and Cabinet Member decisions (with delegated authority taking a corporate / strategic decision) which have been made but not implemented, and referred to the Panel through call-in.

The panel may a) confirm the decision, which may then be implemented immediately, b) confirm the decision back to the decision taker for further consideration setting out in writing the nature of its concerns, or c) refer the matter to full Council in the event that the panel considers the decision to be contrary to the Policy Framework of the Council or contrary to, or not wholly in accordance with the Budget.

- To monitor effectiveness and application of the call-in procedure, to report on the number and reasons for call-in and to make recommendations to the Council on any changes required to ensure an effective operation.
- To scrutinise the Cabinet's performance in relation to the Forward Plan.
- To scrutinise the performance of Portfolio Holders.
- At the request of the Cabinet, make decisions about the priority of referrals made in the event of the volume of reports to the Cabinet or creating difficulty for the running of Cabinet business or jeopardising the efficient running of Council business.

**COLCHESTER BOROUGH COUNCIL
STRATEGIC OVERVIEW AND SCRUTINY PANEL
5 May 2009 at 6:00pm**

Members

Chairman : Councillor Christopher Arnold.
Deputy Chairman : Councillor Margaret Kimberley.
Councillors Nick Barlow, Mark Cory, Pauline Hazell,
Peter Higgins, Mike Hogg, Kim Naish, Gaye Pyman,
Nick Taylor and Julie Young.

Substitute Members : All members of the Council who are not Cabinet members or members of this Panel.

Agenda - Part A

(open to the public including the media)

Members of the public may wish to note that agenda items 1 to 5 are normally brief and agenda items 6 to 9 are standard items for which there may be no business to consider.

Pages

1. Welcome and Announcements

(a) The Chairman to welcome members of the public and Councillors and to remind all speakers of the requirement for microphones to be used at all times.

(b) At the Chairman's discretion, to announce information on:

- action in the event of an emergency;
- mobile phones switched to off or to silent;
- location of toilets;
- introduction of members of the meeting.

2. Substitutions

Members may arrange for a substitute councillor to attend a meeting on their behalf, subject to prior notice being given. The attendance of substitute councillors must be recorded.

3. Urgent Items

To announce any items not on the agenda which the Chairman has agreed to consider because they are urgent and to give reasons for the urgency.

4. Declarations of Interest

The Chairman to invite Councillors to declare individually any personal interests they may have in the items on the agenda.

If the personal interest arises because of a Councillor's membership of or position of control or management on:

- any body to which the Councillor has been appointed or nominated by the Council; or
- another public body

then the interest need only be declared if the Councillor intends to speak on that item.

If a Councillor declares a personal interest they must also consider whether they have a prejudicial interest. If they have a prejudicial interest they must leave the room for that item.

If a Councillor wishes to make representations on an item on which they have a prejudicial interest they may do so if members of the public are allowed to make representations. In such circumstances a Councillor must leave the room immediately once they have finished speaking.

An interest is considered to be prejudicial if a member of the public with knowledge of the relevant facts would reasonably regard it as so significant that it is likely to prejudice the Councillor's judgement of the public interest.

Councillors should consult paragraph 7 of the Meetings General Procedure Rules for further guidance.

5. Minutes

1 - 7

To confirm as a correct record the minutes of the meeting held on 7 April 2009.

6. Have Your Say!

(a) The Chairman to invite members of the public to indicate if they wish to speak or present a petition at this meeting – either on an item on the agenda or on a general matter not on this agenda. You should indicate your wish to speak at this point if your name has not been noted by Council staff.

(b) The Chairman to invite contributions from members of the public who wish to Have Your Say! on a general matter not on this agenda.

7. Items requested by members of the Panel and other Members

(a) To evaluate requests by members of the Panel for an item relevant to the Panel's functions to be considered.

(b) To evaluate requests by other members of the Council for an item relevant to the Panel's functions to be considered.

8. Referred items under the Call in Procedure

To consider any Portfolio Holder decisions, taken under the Call in Procedure.

The panel may a) confirm the decision, which may then be implemented immediately, b) confirm the decision back to the decision taker for further consideration setting out in writing the nature of its concerns, or c) refer the matter to full Council in the event that the panel considers the decision to be contrary to the Policy Framework of the Council or contrary to, or not wholly in accordance with the Budget.

9. Decisions taken under special urgency provisions

To consider any Portfolio Holder decisions taken under the special urgency provisions.

10. Work Programme

See report from the Scrutiny Officer.

11. Review of the work of the Portfolio Holder for Planning and Regeneration

8 - 9

See report from the Scrutiny Officer.

12. A new Build nuclear power station at Bradwell

10 - 22

See report from the Scrutiny Officer.

13. Exclusion of the public

In accordance with Section 100A(4) of the Local Government Act 1972 and in accordance with The Local Authorities (Executive Arrangements) (Access to Information) (England) Regulations 2000 (as amended) to exclude the public, including the press, from the meeting so that any items containing exempt information (for example confidential personal, financial or legal advice), in Part B of this agenda (printed on yellow paper) can be decided. (Exempt information is defined in Section 100I and Schedule 12A of the Local Government Act 1972).

STRATEGIC OVERVIEW AND SCRUTINY PANEL

7 APRIL 2009

Present :- Councillor Christopher Arnold (Chairman)
Councillors Nick Barlow, Pauline Hazell, Peter Higgins,
Mike Hogg, Margaret Kimberley, Kim Naish, Nick Taylor
and Julie Young

Substitute Members :- Councillor Ray Gamble for Councillor Mark Cory
Councillor Dennis Willetts for Councillor Gaye Pyman

52. Urgent Items

Councillor Naish addressed the panel, saying that following the letter received by all Councillors from Banner Holdings Limited, and in regards to the issue of the personal liability of Councillors, the ongoing embarrassment to the Council and other matters, he requested the Chairman to agree to this issue being discussed by the panel.

Chairman, Councillor Arnold said that there was a legal entitlement of the Council to give five clear working days notice to members of the public in providing details of the items to be discussed at meetings, unless the Chairman decides it would be in the public's interest to hear an item and there was not sufficient time to publish the details. Councillor Arnold said he did not think this issue needed to be dealt with as a matter of urgency and that it could effectively be dealt with by the Finance and Audit Scrutiny Panel at their meeting on the 28 April 2009 when the meeting will be fully devoted to the review of the Firstsite:Newsite funding arrangements.

53. Minutes

The minute of the meeting of the 17 March 2009 was confirmed as a correct record.

54. Items requested by members of the Panel and other Members

Councillor Arnold said the item requested by Councillor Naish could be evaluated by the panel, though this was not relevant to the panel's responsibilities, and should be considered by the Finance and Audit Scrutiny Panel (FASP) as part of their review on the 28 April 2009.

Councillor Hogg said that if the panel could be assured that this issue would be addressed within a report to go to FASP at the meeting of the Firstsite:Newsite review, in the public domain and open to scrutiny, he would be happy for this to be discussed on that evening.

Councillor Naish said he believed that due to the threatening letter received by Councillors, the large sums of money involved in the dispute and the disgraceful

behaviour of some people that this matter should be discussed as a matter of urgency.

Mr. Adrian Pritchard, Chief Executive of Colchester Borough Council addressed the panel to confirm that a report that would encompass the issue's and concerns expressed by Councillor Naish could be drafted for the FASP consideration, along with two other reports including one from the Audit Commission. Mr. Pritchard confirmed he had not seen the final Audit Commission report, but that it would be reported to FASP.

RESOLVED that the panel agreed that a report encompassing the issue's and concerns expressed by Councillor Naish should be drafted and presented to the Finance and Audit Scrutiny Panel meeting of the 28 April 2009, in conjunction with the review of the financial arrangements of Firstsite:Newsite.

55. Decisions taken under special urgency provisions

The Chairman confirmed to the panel that he had agreed to approve two key decisions under the special urgency provisions. The two decisions are consultation responses to the Parking Standards Report and the Tendring Core Strategy. Councillor Arnold explained that when the consultations were received, there was not, due to the response deadlines, sufficient time to put on the Council's Forward Plan.

56. Work Programme 2008-09

RESOLVED that;

- i) The rolling work programme was noted.
- ii) The panel agreed to meet at an extra meeting as soon as possible, to consider two outstanding items on the work programme, i) The review of the work of the Portfolio Holder for Regeneration and Planning, and ii) The final report on 'New build Nuclear Power Station at Bradwell'.

Councillor Margaret Kimberley (in respect of a Board Member of Colchester Borough Homes) declared a personal interest in the following item pursuant to the provisions of Meetings General Procedure Rule 7(3)

Councillor Julie Young (in respect of the spouse of a Board Member of Colchester Borough Homes) declared a personal interest in the following item pursuant to the provisions of Meetings General Procedure Rule 7(3)

57. Review of the work of the Portfolio Holder for Neighbourhoods

Councillor Beverley Oxford, Portfolio Holder for Neighbourhoods attended the meeting for this item and addressed the panel.

Councillor Oxford said she was passionate about her Neighbourhood responsibilities, a view shared by the officers with whom she was in daily contact.

Councillor Oxford said she had adopted a hands on approach, and gave a long list of service areas and officers that she had spent time with in the last ten months to get a feel for and a better understanding of the good work, the problems and difficulties experienced by officers.

Councillor Oxford explained that the Homelessness Strategy was implemented in July 2008 and the Housing Strategy was adopted in October 2008, both subject to continual monitoring. Councillor Oxford was a member of the Asset Management Board, receiving regular updates on progress and the Colne Housing Board, and was hopeful the Decent Homes Programme (DHP) would recommence in November 2009.

In response to Councillor Kimberley, Councillor Oxford said Colchester compared favourably with other similar councils in regards to homelessness. The Homelessness Team are proactive in their work, working tirelessly with families to try to prevent homeless situations.

In response to Councillor Hogg, Councillor Oxford said the DHP would probably be completed by 2012, that the Government had now realised the target of making all homes decent by 2010 was not realistic. Councillor Oxford said that although the Council would strive to meet this target, in effect, homes will always need repairing or refurbishing and this would become an ongoing rolling work programme.

In response to Councillor Young, Councillor Oxford said the upkeep and maintenance of garage sites is a low priority, but accepted the difficulty that they attract anti social behaviour. Councillor Oxford said there still remained 1,000 timber framed and single glazed Council properties in the borough that would require three to four million pounds to refurbish, though she was confident of the funding to complete the works on outstanding kitchens and bathrooms. Confirmation was given of the recent tendering process to award contracts for fitting new windows and doors (to start soon), and the contract for the repairs service for doors and kitchens to void properties (awarded). Councillor Oxford agreed for the panel to have an update on the work involved on garage sites.

Ms. Lindsay Barker, Head of Strategic Policy and Regeneration said it was a national issue about the shortfall in funding available for capital works programmes in general beyond the decent homes standard, and there is consultation underway on the Housing Subsidy approach and the impact on capital works within the Housing Revenue Account. There is an awareness to the extent of works that is beyond the current means of the capital available as in other Councils.

In response to Councillor Naish, the panel agreed that officers should provide an information note to members on the national issue of tenants being evicted from properties due to the repossession of the property by the mortgagee when the

landlord / property owner forfeits on the property mortgage.

Councillor Oxford confirmed to Councillor Taylor that homelessness remained a top priority for the Council. Councillor Oxford said the homelessness team was extremely competent and doing a very good job. The financial downturn could increase the work volume, and informative leaflets are being given to local residents for seeking help at the earliest opportunity. Though debt and mortgage advisors are on hand to attempt to help residents to stay in their homes, should the economic downturn cause a resources problem, Councillor Oxford promised she would fight her corner to have the appropriate resources available. Councillor Oxford also confirmed that in regards to the Housing Strategy, the Council consulted with private developers, the voluntary sector, Colchester Borough Homes, residents associations and the public sector to bring about an inclusive strategy. A website was being established, that would communicate to, and inform residents, with a framework in place to engage and get feedback from residents.

Ms. Barker confirmed that work was progressing and on track in regards to the Anglian Water sewerage programme. Further to the enquiry from Councillor Kimberley regarding temporary accommodation at 60 Creffield Road, the panel requested an informative note on the progress from the Head of Life Opportunities.

Councillor Oxford said she hoped the Ascot House, the temporary accommodation property would be redeveloped, with the site being big enough to demolish for the purpose of providing purpose built properties for homeless people and an ongoing presence from the appropriate agencies, though she emphasised that registered social landlords had only given a vague expression of interest. Councillor Oxford further confirmed that whilst it was the long term intention to close both temporary accommodation properties in Military Road, one of these properties would in the meantime undergo refurbishment.

Ms. Barker confirmed to Councillor Kimberley that the key dates of the Housing Review are the report on the current situation in May 2009 and the outcome of the review in October 2009.

In response to Councillor Willetts, Councillor Oxford said at the start of each year the total budget for Aids and Adaptations (AA) is already allocated to a planned programme of work, so yes, she was continually asking for further funding and confirmed the virement to the AA budget had been approved that had allowed for additional work. In regards to the Decent Homes Programme, Councillor Oxford understood the concerns expressed by Councillor Willetts and Arnold that there was a justified perception that rural areas are always at the back of the queue, and reassured them that the remaining programme would not be scheduled on a geographical basis, but on a needs and priority basis.

Councillor Oxford confirmed to Councillor Willetts that the 2006 and 2008 surveys revealed there was under ten people sleeping rough in the town, and that the Government rules are that when under ten the local authority are not obliged to carry out further surveys. Councillor Oxford said that the Council would continue to survey, though she was confident through the current arrangements with the Night Shelter and

village and community halls that this potential problem was appropriately monitored and managed.

Councillor Willetts expressed reassurance from the responses of Councillor Oxford. Councillor Gamble appreciated the passion in which Councillor Oxford carried out her portfolio duties.

Ms. Barker confirmed to Councillor Gamble that the Council did retain a 'Sensitive Lets' list. Councillor Gamble requested an informative note on the Council's approach from the Head of Life Opportunities.

In response to Councillors Gamble and Arnold enquiry concerning rural nominations, Ms. Barker was asked to provide panel members with an informative note on rural nominations and the legal position around this.

Councillor Oxford confirmed to Councillor Arnold that the criteria for the order of the DHP implementation were laid down in the report to the January Cabinet meeting.

Councillor Arnold thanked Councillor Oxford for attending the meeting and her response to the panel and wished her good luck with her future work.

RESOLVED that the panel:

- i) Noted the responses from the Portfolio Holder for Neighbourhoods and thanked her for attending the meeting.
- ii) Requested an informative note from the Head of Life Opportunities on the national issue of tenants being evicted from properties due to the repossession of the property by the mortgagee when the landlord / property owner forfeits on the property mortgage.
- iii) Requested an update from the Head of Strategic Policy and Regeneration on the work involved on garage sites.
- iv) Requested an informative note from the Head of Life Opportunities on the progress of the work involving the temporary accommodation at 60 Creffield Road.
- v) Requested an informative note from the Head of Strategic Policy and Regeneration on rural nominations and the legal position around this.
- vi) Requested that Councillor Gamble receives a response on the Council's approach to "Sensitive Lets" from the Head of Life Opportunities.

Councillor Julie Young (in respect of being a Member of Essex County Council) declared a personal interest in the following item pursuant to the provisions of Meetings General Procedure Rule 7(3)

58. Review of the work of the Leader of the Council, Portfolio Holder for Strategy

Councillor Turrell, The Leader of the Council and Portfolio Holder for Strategy attended the meeting and gave a short presentation on the work she has been involved in during her first year as the Leader of the Council.

During her presentation and in response to panel members, Councillor Turrell confirmed that the three major partnerships remained with Essex County Council, the Haven Gateway Partnership and Regional City East, though the partnerships and relationships for each are different.

In response to Councillor Young, Councillor Turrell said the Haven Gateway Partnership was working well and there was soon to be an announcement concerning the funding of the Town Centre Cultural Quarter and St Botolphs Station projects. Councillor Turrell also said that this project whilst in Colchester was to the benefit of the whole gateway region and was secured through the partnership working.

In regards to traffic congestion Councillor Turrell said that the Council was working in partnership with Essex County Council and two major landowners to provide an A12 junction to North Colchester linked to a 1,000 car 'park and ride' facility, an overall development that Colchester could not have done alone, but which Colchester was definitely leading on. Councillor Turrell said it was hoped this would be in place by 2011, and that some of the funding would only be available is used for this purpose within this timeframe. Councillor Turrell confirmed to Councillor Willetts that this was the major scheme for tackling traffic congestion in Colchester, but coupled with this the Council was working on numerous other small schemes to improve traffic flow.

Later in the discussions, Councillor Turrell, responded to Councillor Taylor, confirming that Regional Cities East are looking at transport issues in this region, both road and train.

Councillor Turrell, in response to Councillor Arnold said the Braintree Partnership still remained, and although the only partnership service that has transpired was for Parking Services, regular six monthly meetings will continue to nurture a closer partnership with Braintree, and similar partnership discussions would continue with Tendring. Geographically the three districts councils were close with similar problems so it made sense to continue partnership discussions. Councillor Turrell said whilst she was supportive of a Unitary Authority, this did not form any part of these discussions. Later, Councillor Turrell said to Councillor Taylor that the Administration would consult with all members on future work in regards to Unitary status.

In response to Councillor Naish, Councillor Turrell said questions concerning the overseeing of the Visual Arts Facility project should be directed to Councillor Hunt to whom she had delegated this responsibility. Councillor Turrell said what had surprised her most in the time she has been Leader was how well the Cabinet members worked together, given they were comprised of members from three different groups. She said it had not all been easy, but she was proud of what they had all achieved.

In response to Councillors Arnold and Willetts, Councillor Turrell said the Administration was committed to Colchester's Heritage, forming part of the Community

Development strand of the Strategic Plan. Councillor Turrell confirmed that the strategy was still to promote cultural activities in Colchester, though she understood the disappointment of members for the loss of budget funding for the Chariot Circus, though the responsible Portfolio Holder would be dealing with this specific issue.

Councillor Turrell said she did not like the way such a great deal of hers, and other Portfolio Holder's time was spent chasing funding for various projects, thereby leaving little time to give to other important issues, though she understood as frustrating as it was, it was necessary.

Councillor Turrell agreed with Councillor Arnold that the consultation on the Strategic Plan as undertaken in the Courier had returned a very disappointing response, though the Council does provide for the public to respond on Council matters on the website, Angel Court Screens and other consultations, and all these strands of communication were taken into account when the Strategic Plan was drafted.

In response to Councillor Gamble, Councillor Turrell said she felt equally passionate about Mile End and Colchester, and whilst her priority was to Colchester, she did not think her roles as Leader, Ward Councillor or County Councillor compromised the work of these roles.

RESOLVED that the panel noted the responses from the Leader of the Council, Portfolio Holder for Strategy and thanked her for attending the meeting.

59. Responsibilities of the Portfolio Holder for Planning and Regeneration (in preparation for the next meeting)

RESOLVED that;

i) The panel noted the responsibilities of the Portfolio Holder for Planning and Regeneration in preparation for the next meeting.

ii) The panel advised the Portfolio Holder for Planning and Regeneration that the panel would seek responses from her on;

- The regeneration of the Hythe
- The Council's consultation response to Tendring District Council's Core Strategy, and specifically, the Crown Interchange and the creation of 800 new homes and 1,300 new jobs.



Strategic Overview and Scrutiny Panel

Item
11

5 May 2009

Report of

Scrutiny Officer

Author **Robert Judd**
Tel. 282274

Title

Review of the work of the Portfolio Holder for Planning and Regeneration

Wards affected

Not applicable

This report sets out the responsibilities of the Portfolio Holder for Planning and Regeneration

1. Action Required

- 1.1 The Panel is asked to review the work of the Portfolio Holder for Planning and Regeneration.

2. Responsibilities of the Portfolio Holder for Planning and Regeneration

- 2.1 The responsibilities are as follows;

- (i) To oversee the implementation and monitoring of the Council's policies and services relating to all planning activities including conservation and building control.
- (ii) To monitor the implementation of the Local Plan.
- (iii) To promote and procure the implementation of the Borough Council's Transport Strategy in partnership with Essex County Council, the responsible Transport Authority and other partners, to improve infrastructure.
- (iv) To promote partnership working with Essex County Council, the responsible transport authority.
- (v) To oversee major regeneration projects which impact upon the Council's landholdings.
- (vi) To support local and regional partnerships which can lever in new investment into the borough's four regeneration areas.

Major projects in the portfolio include the Cultural Quarter, Vineyard Gate, North Colchester, including the Community Stadium and East Colchester.

3. Delegation to the Portfolio Holder for Planning and Regeneration

To procure the specified service in the provision, implementation, maintenance and management of:

- Functions as Local Planning Authority (planning)
- Building regulations and allied legislation relating to dangerous buildings and safety at sports grounds (planning).

- The preparation of Supplementary Planning Documents and the issue of draft Supplementary Planning Documents for consultation - Local Development Framework (LDF).
- To agree the Statement of Community Involvement and the Annual Monitoring Report (LDF).

To procure and or encourage the procurement of the delivery of the Council's regeneration agenda including sustainable housing, infrastructure, employment and leisure facilities.

To develop policies in relation to sustainability, and to oversee and promote the implementation of the Nottingham Declaration objectives.

4. Standard References

- 4.1 There are no policy plan references or financial, human rights, community safety or health and safety implications in this matter.
- 4.2 Scrutiny is a key function to ensuring the work of the Portfolio Holder is subject to full appraisal and in line with the aims of the strategic plan.



Strategic Overview and Scrutiny Panel

Item
12

5 May 2009

Report of	Strategic Overview and Scrutiny Task and Finish Group	Author	Robert Judd Tel. 282274
Title	A new build nuclear power station at Bradwell		
Wards affected	All		

The Panel is invited to consider the report from the task and finish group, who undertook an in depth review of the issues raised by the panel on civil nuclear electricity generation in respect of a new build nuclear power station at Bradwell.

1. Action(s) Required

- 1.1 To consider and endorse the proposals of the working group as set out in paragraph 4, that provide actions to issues raised by the panel in respect of a new build nuclear power station at Bradwell.

2. Reasons for Action(s)

- 2.1 Following a Council motion on the 20 February 2008, where the Council considered that the possible construction of a new nuclear power station, so close to the Borough of Colchester would arouse a great deal of local interest, discussion and even controversy. The Council therefore requested the Strategic Overview and Scrutiny Panel to consider all sides of the argument with a recommendation that expert witnesses be invited to assist the Panel in its deliberations and that the outcome and any recommendations be reported to the Cabinet and Full Council for decision.

3. Contents of report

- Section 4 – Summary of Recommendations based on the work by the Strategic Overview and Scrutiny Panel and the task and finish group.
- Section 5 – The Government's Consultation process for new build nuclear power stations
- Section 6 – Summary of work undertaken by the task and finish group
- Section 7 – Details of the issues reviewed by the task and finish Group

4. Summary of Recommendations

4.1 The task and finish group requests the Strategic Overview and Scrutiny Panel to propose the following recommendations to the Cabinet;

- The Cabinet approves the formation of an internal Bradwell Liaison Working Group to consider all the issues and proposals for the Bradwell site as they develop. There remains important pieces of investigative work that could not be finished within the time and resources allotted to the task and finish group and should form part of the work of this new group, including;
 - ❖ The examination of future flooding and sea defences in relation to climate change and any new build station at Bradwell, and consideration to such documents as the Shoreline Management Plan for Essex (see paragraph 7.3.2).
 - ❖ To get a more informative view of the chlorination process of any new build station and what this would mean for the eco system of the estuary and the livelihoods of local fisherman (see paragraph 7.4).
- The Cabinet requests Essex County Council to consider the formation of the Essex Nuclear Energy Group, comprising Essex County Council, Maldon District Council and Colchester Borough Council and other leading key organisations for the purpose of meeting informally to discuss any proposals put forward for the Bradwell site and to consider the strategic issues and benefits of such a proposal, and be in a position of ensuring thorough and effective consultation with local people, businesses and key organisations.
- The Cabinet requests the NHS North East Essex to determine the validity of the information submitted by Mr. Urquhart in reference to the new registered cases (by age group) of malignant neoplasms, and the suggestion of discrepancies in respect of the data from the Essex Shared Services Agency (part of NHS PCT) and the North Thames Cancer Registry, and to give reassurances that any change to the data base material is reflected in any future conclusions made by COMARE.
- That the Cabinet, in the likely event of a planning application for a new build be forthcoming, will respond to the new Infrastructure Planning Commission (IPC) on planning consultation processes, and furthermore, that the Council will consider the design and scale of any new build, what must be done to mitigate against the potential obtrusiveness of the structure to the residents of West Mersea and the surrounding area, and respond accordingly.
- That the Cabinet seeks assurances from the Government that the site owner / energy company will be required to commission independent intensive field studies of the Bradwell estuary to the end of the productive life of any new build nuclear power station.
- That the Cabinet seeks assurances from the Government that as part of the planning process (Infrastructure Planning Commission) it should be a requirement of the energy company / site operator to produce a strategy for engaging with the local population (for the Bradwell site, to include Mersea island and the surrounding area), using every medium of communication to provide information on the current and future operation, risks and developments of the operating site(s).

- That the Cabinet requests the Health and Safety Executive / National Emergency Planning Liaison Group (Part of the Government department of Business, Enterprise and Regulatory Reform) to consider a new DEPZ (Detailed Emergency Planning Zone) beyond the current 2.4 km, for all new and more powerful nuclear power reactors/stations, and also to consider whether the DEPZ, graphically shown as concentric circles around the Bradwell site, could differ given that, as we believe, the emergency planning zones for the Control of Major Accident Hazards (COMAH) are egg shaped. If either the distance or shape of the DEPZ was changed it was acknowledged that Mersea island would almost certainly fall within the DEPZ, and the difficulty of evacuating the island would become an issue that would require addressing, having the potential to make the site considered unsuitable.

5. The Government's Consultation Process for new build nuclear power stations

Consultation on the Strategic Siting Assessment Process and Siting Criteria for New Nuclear Power Stations in the UK

- 5.1 The task and finish group presented a report and draft consultation response to the Strategic Overview and Scrutiny panel meeting of **4 November 2008**. The purpose of this item was to have the opportunity to make recommendations on the proposed response to the consultation paper. The Government consultation was duly signed off by the Leader of the Councillor.

Have Your Say – leaflet from the Government's Department of Energy and Climate Change

- 5.2 At a meeting of the task and finish group, British Energy had informed the group of the Government's Department of Energy and Climate Change (DECC) leaflet on Have Your Say, a leaflet briefly explaining how new nuclear power station sites will be chosen and how people can have their say. The group felt that it was appropriate that this leaflet was distributed to all households of West Mersea. Colchester received 3,500 leaflets from the Department of Energy and Climate Change that were distributed to all households on Mersea Island during April at a cost of £150.00.

Nominations for sites for new build nuclear power stations

- 5.3 Nominators had to inform local authorities and landowners that they planned to nominate a site. They also needed to publicise that they planned to nominate a site through adverts in local papers, and published in the Colchester Gazette on Thursday 16 April 2009. The deadline for nominations was 31 March 2009. The Government published the nominated sites and the Council arranged for details of nominations and comment sheets to be seen at the West Mersea Town Council, East Mersea Parish Council, West Mersea Library, Colchester Town Library and Colchester Town Hall. Comments were invited by the Government, as an opportunity to gather further relevant information to be considered by the Government. This was not a formal consultation, but an opportunity for comments on the Strategic Siting Assessment Criteria. The comment window is from 15 April 2009 to 14 May 2009.

6. Summary of work undertaken by the task and finish group

- 6.1 The first meeting, by the Strategic Overview and Scrutiny Panel (SOSP), undertook a review of the possibility of a new nuclear power station at Bradwell, at the Mersea Centre

on **23 September 2008**. A number of issues were raised but not resolved on the evening, and the Panel agreed that a task and finish group should undertake further studies of these issues and report their findings back to the panel so that a more informed proposal could be put to Cabinet.

- 6.2 The task and finish group presented a report and draft consultation response to SOSP on the **4 November 2008**. The purpose of this item was to have the opportunity to make recommendations on the proposed response to the consultation paper "Consultation on the Strategic Siting Assessment Process and Siting Criteria for New Nuclear Power Stations in the UK". At this meeting it was agreed that any response should not state seismic risk as an exclusionary criterion as this would harm the credibility of the Council's response, and that the consultation response would include 'storm surge and coastal processes' as a separate exclusionary criterion as this was inextricably linked to flooding. The Government consultation was duly amended and signed off by the Leader of the Council.
- 6.3 The Environment Agency and the Health and Safety Executive published an article in the January edition of LGA First "Nuclear Reaction" <http://www.lga.gov.uk/lga/aio/1546377> The task and finish group acknowledged this report and noted that West Somerset Council now meets informally with Sedgemoor District Council and Somerset County Council at the Somerset Nuclear Energy Group (SNEG) and considered the possibility of a similar group in Essex.
- 6.4 The task and finish group held meetings on the **3 March 2009, 25 March 2009, 31 March 2009** and the **21 April 2009**, to address the issues raised by SOSP.

Members of the task and finish group:

- Cllr Arnold (Chairman)
- Cllr Barlow
- Cllr Bouckley
- Cllr Cory
- Cllr Ford

The following guests attended the group meetings:

- Mr. Colin Daines, Protective Services Manager, Colchester Borough Council
- Mr. Paul Walker, Joint Emergency Planning Officer, Colchester BC and Essex CC
- Mr. Nigel Knee, Integration Manager, British Energy (EDF)
- Mr. Colin Taylor, Marine Ecologist, British Energy (EDF)
- Mr. Alan Bird, West Mersea Oystermen and member of the Blackwater Oystermans Ass.
- Mr. David Smart, Essex Wildlife Trust
- Ms. Sarah Allison Conservation Officer, Essex Wildlife Trust
- Mr. Brian Robinson, Centre for Environment, Fisheries and Aquaculture Science (Cefas)
- Mr. Steve Millward, Centre for Environment, Fisheries and Aquaculture Science (Cefas)
- Professor Graham Underwood, Professor of Ecology, University of Essex

7. Details of the Issues reviewed by the task and finish group

- 7.1 Appendix A shows the minutes of all the task and finish group meetings.

7.2 Health issues

- 7.2.1 The Scrutiny Officer wrote to Dr David Irwin, Essex Health Protection Unit concerning the issue of Childhood Cancer, and the research commissioned by the German Government on Leukaemia risk to children who live near nuclear power stations, and as the results suggested there could be a risk to children living in close proximity to the Bradwell site. Appendix B shows the response from Dr David Irwin, including details of a statement the Health Protection Agency's Radiation Protection Division prepared concerning the German study. In short, Dr Irwin refers the Council to the reports from the Committee on Medical Aspects of Radiation in the Environment (COMARE) on the issue of childhood cancer. The COMARE reports show that childhood leukaemia and many other types of childhood cancers do not occur evenly within the population of Great Britain. There are a variety of incidence rates in different geographical and social circumstances and that these differ more than would be expected from simple random or chance variations. This uneven distribution (or clustering) occurs at all levels of population distribution throughout the country, down to very local levels such as those of electoral wards. It is not known why childhood cancers tend to cluster like this. The data base compiled by the Childhood Cancer Research Group and used by COMARE, is believed to be the worlds largest national database.
- 7.2.2 ***It was concluded that having considered the response from Dr Irwin, the Council are sympathetic to the concerns of local people and groups about the potential health risks associated with nuclear power stations. Should new evidence on health risks be provided to the Council in the future, the responsible way to proceed would be for the Council to write to the Director of Public Health and Health Policy, NHS North East Essex to ask for assurances that the Essex Health Protection Unit would request COMARE to undertake further examination of the information submitted.***
- 7.2.3 It was brought to the task and finish group's attention that a leading cancer researcher, Mr J Urquhart, has recently unearthed what he believes are discrepancies in data from the Essex Shared Services Agency (part of Primary Care Trust) and the North Thames Cancer Registry in reference to new registered cases (by age group) of malignant neoplasms. Both agencies monitor almost identical geographical areas. See appendix C for further details. The Council cannot make a judgement on this evidence, but it was acknowledged that it could have an effect on the data base compiled by the Childhood Cancer Research Group at Oxford.
- 7.2.4 ***The task and finish group concluded that the Council should write to the Director of Public Health and Health policy, NHS North East Essex to ask that the Essex Health Protection Unit request the Childhood Cancer Research Group to examine the data and determine the reasons for the discrepancies, and for the Essex Health Protection Unit and COMARE to determine whether any new data effects their previous conclusions.***
- 7.2.5 ***The task and finish group also noted that the Council's response to the Government consultation in November covered health issues generally, in asking that there should be an additional discretionary criterion on health issues that could take account of all relevant current and future research.***
- 7.3 **Effect to new build of climate change, sea level surges and major flooding**

- 7.3.1 The task and finish group noted that in terms of the design of new build nuclear power stations, the designers do take account of climate change, weather patterns in general including storm surges when modelling new designs. It was also noted that the Environment Agency had previously confirmed that the Generic Design Assessment focused on the safety and security of the design during the whole life of the build and should a licence application not meet the required standards a license would not be granted.
- 7.3.2 Professor Underwood later informed the group that this year the Colne Estuary Partnership was revamped, and it is now partly run under the auspices of the University. A GIS database is being developed to hold all the information the University has gathered over 30 years of research activity, along with other information and designations, all in an accessible fashion. Such amalgamated data sets are what was needed to help deal with the type of questions the group had discussed in relation to Bradwell. Professor Underwood said it was the aim of the University to be more proactive with local communities and statutory bodies and act as a centre point for consultation on matters, such as the Shoreline Management plans, the Water Framework directive, Water Quality, and the new Marine Bill and Marine Framework Directive, matters he believed the Council, as a key public organisation should be engaged in, and the Colne Estuary Partnership was an ideal vehicle for such activity.
- 7.3.3 ***The task and finish group noted the advice given by British Energy, the Environment Agency and the Health and Safety Executive, that the design would be flood proof, even in a state of inundation. It was also noted that climate change and weather patterns are changing, and will do so, probably more progressively, as we move further into this century, though there remains differing expert opinion to the degree and effects of future climate change.***
- 7.3.4 ***The task and finish group recognised that residents of Mersea Island and the surrounding area will become vulnerable to major flooding as this century progresses, regardless of whether or not a new nuclear power station is built at Bradwell and the Council have a responsibility to mitigate against this eventuality and the risk to the safety of their local residents (See Emergency Planning and Local Evacuation.***
- 7.3.5 ***The task and finish group noted that a document titled the Shore Line Management Plan for Essex, due to go to public consultation in July 2009 was shortly to be published. The document was divided into three epochs, to 2025, 2025 – 2050 and 2050 – 2100, and would be a good piece of work for a future working group to draw a conclusion in terms of the future cumulative effects of climate change and storm surge to flooding and sea defences and any new build.***
- 7.4 Shallow Blackwater estuary, thermal plumes and power station discharges**
- 7.4.1 The task and finish group heard from marine ecologists from British Energy, Cefas and the University of Essex, the Essex Wildlife Trust and a local fisherman.
- 7.4.2 It was confirmed that low level gas and liquid emissions are extremely small, almost undetectable, but strictly monitored by the regulatory bodies, and that whilst the exact permitted levels for any new build are yet to be decided, the new design will in terms of emissions improve greatly from the original Magnox reactors. At the September meeting

at West Mersea, officers from the Environment Agency said radioactive discharges are strictly monitored and the doses to all effluent discharges to both the atmosphere and local water to Bradwell is subject to rigorous monitoring. The legal limit of radiation dose is one thousand microsieverts from an artificial, non medical source of radioactivity per year. Latest reports say the most exposed people (for liquid discharge) receive a dose of 10 microsieverts per year, 0.1% of the legal limit, and for terrestrial discharges, 5 microsieverts per year. To put this into context the average dose of natural radiation to the general public is about 2,400 microsieverts per year.

- 7.4.2 The group discussed a report brought to their attention where researchers claim that nuclear power plants are sucking the sea life from British waters.
- 7.4.3 A representative from Cefas explained that future scenarios were based on the water intake and outflow of the new generation of nuclear power stations, 72,000 cubic litres of water per second, more than twice the volume of the original nuclear reactor, and representing 10% of the total volume of exchange water on each tide.
- 7.4.4 A presentation showed the oceanographic layout of the Blackwater estuary, including the deep channel running through the estuary. The presentation simulated water conditions within the estuary with a fully operational new build reactor, showing the movement of the thermal plume created from the power stations warm water outflow. The simulation was a projection of the water dynamics of the estuary taking into account future climate change predictions from the Met Office. It was confirmed that the baseline for climate change predictions is from the work of the Defra funded UK climate Impacts programme. It was explained that a number of intake and outlet configurations had been modelled and the simulation that had showed the optimum environmental results was for water intake to come from the deep channel and for outflow to happen south of the deep channel to the east of the inlet. This configuration would avoid excessive temperature rises for the environmentally sensitive areas of the inner estuary and the north shore. Temperature rises of up to 10C would be experienced on the south shore in the vicinity of the power station. With the intake and outflow pipes sited in this configuration thermal recirculation from the outfall to the infall would be limited to a maximum of approximately 2 per cent.
- 7.4.5 The group was told that nuclear power stations taking in coastal sea water will not tolerate marine growth, and the use of chlorine compounds prevents marine life sticking to inlet and outflow pipes. Some of these compounds do get discharged to the estuary though they decay rapidly and residual oxidants normally cannot be detected once 500 to 1000 metres beyond the outflow pipe. Mr. Bird, a local Oysterman since 1964, said that during the period of the late 1960s to the mid 1970s, the foreshore and sea beds along the Bradwell coast became sterile and barren, with the ground very bleached for approximately one and a half miles either side of the outflow pipe. Native oysters disappeared from along the northern shore of the Bradwell coastline. Mr. Bird said that within six months of the closure of the Power Station, this coastline began to regenerate with new growth appearing along with new oysters.
- 7.4.6 In regards to concerns of the affect on marine life, the group were informed that it was in the operational interest of the power station owners to avoid large intakes of fish, which could cause blockages in the system and compromise the efficiency of cool water intake and ultimately the power station economics. Fish inlet screens and deterrents were installed to mitigate these occurrences for large fish. That said it was inevitable that larvae and eggs will get through the screening, and depending upon the species a large

percentage would be killed or damaged by the 10C temperature rise, pressure changes and the chlorination process. Cefas were undertaking detailed research on this subject to more precisely determine effects on marine life.

- 7.4.7 Mr. Bird said he believed that the information currently held by the environment agencies in regards to the Blackwater Estuary was flawed, especially given that information he had recently disclosed was new information, a point echoed by the Essex Wildlife Trust. Mr. Bird also believed that the thermal plume of a new build power station, and as shown in a simulated model presented by Cefas would almost certainly have an effect on the seed oysters placed close to Mersea Island for fattening (a farming technique used in the estuary to improve cultivation, unlike other areas where oysters are only fished), and the oyster beds to the south shore of the river at Chapel Point and Batchelor Spit.
- 7.4.8 ***The task and finish group noted the advice given to members, that the design application would take account of fish impingement and the systems to be used to minimise the impact on fish stocks at the point of water intake***
- 7.4.9 ***The task and finish group noted the effect of the chlorination process, that is, a bleaching of the immediate coastline that becomes almost void of all marine life.***
- 7.4.10 ***The task and finish group believed more information and evidence was required to understand the overall effect of fish impingement and chlorination on marine life and fish stocks in the estuary to thereby make a more considered judgement.***
- 7.4.11 ***The task and finish group concluded that it was imperative that the intensive independent field studies, like those of Cefas (as commissioned by the energy companies), should be continually undertaken within the estuary to the end of the productive life of any new build nuclear power station..***

7.5 Emergency Planning and Local Evacuation

- 7.5.1 The task and finish group noted the Government's Emergency Planning legislation and Guidance, such as the Civil Contingencies Act (CCA), Emergency Preparedness guide to the CCA and the Emergency Response and Recovery guide to the CCA, cascade down to various Government offices, feeding into the Essex County Council Emergency Planning Service. Essex Police Contingency Planning provides the Combined Operational Procedures for Essex (COPE) that deal with emergency plans for Essex Police, Essex Fire and Rescue, East of England Ambulance Services and all Local Authorities. Within these plans are numerous plans and guidance including a Flood Plan and a Bradwell Emergency Plan.
- 7.5.2 Colchester Borough Council's Emergency Response Plan consists of the generic response procedure the Council will deploy to any major emergency, and where appropriate identifies specific hazards and sets out unique response procedures including those for major incidents such as Bradwell Power Station (release of radioactive pollution), Flooding (tidal flooding, the isolation of mainland and island communities, fluvial flooding and contaminated water) and terrorist attack. One of Essex County Councils Emergency Plans is the Bradwell off-site Emergency Plan, which is site specific, and details response and operational arrangements in respect of an incident resulting in the release of radioactive pollutants at the site and the possible impact off-site. The Detailed Emergency Planning Zone (DEPZ) for Bradwell Power Station has been set at 2.4 km (1.5 miles). The nearest point within the Borough of Colchester is

West Mersea, which is just outside the 2.4 km zone. Maldon District Council has prepared an Emergency Plan which sets out to deal with the consequences of a partial or total evacuation of the DEPZ. The author of the Bradwell off-site plan is Essex County Council Emergency Planning Unit. The plan is written in consultation with all external professional partners and the site. Whilst Colchester Borough Council consults on the plan; it has no direct responsibilities under the plan although assistance with the general welfare and support of evacuees may be requested. In the event of an incident invoking an evacuation (for example, of Mersea Island) the Police Service would take the lead, with a combined input from LA Emergency Planning Officers, Essex Fire and Rescue, and the East of England Ambulance Services, and members of the Essex Resilience Forum that includes all professional partners regularly attending Emergency Planning forums.

- 7.5.3 *The task and finish group noted the emergency plans and procedures in place in the event of a major emergency, including in the event of an incident invoking an evacuation of Mersea Island.***
- 7.5.4 *The task and finish group considered that it should be a requirement of the energy company / site operator to produce a strategy for engaging with the local population (to include Mersea island and the surrounding area), using every medium of communication to provide information on the current and future operation, risks and developments of the operating site(s).***
- 7.5.5 *The task and finish group considered that a new and more powerful nuclear reactor / station could merit a new DEPZ which in turn could change graphically from the current concentric circles to egg shaped rings as is currently the case with other emergency planning zones. If the distance of the DEPZ changed and thereby include Mersea Island the difficulty of evacuating the island would become an issue that would require addressing, having the potential to consider the site unsuitable.***
- 7.6 *The remoteness of the Bradwell site / visually intrusive / noise and blight to the community***
- 7.6.1 Following discussions the group agreed that whilst technically, and from a point of view of road travel, Bradwell was relatively remote, there was a visual impact to the residents of Mersea Island and therefore from their perspective could not be considered remote.
- 7.6.2 British Energy said that the old style Magnox reactors, with gas circulated motors, were noisy, and could be heard from many miles away with a prevailing wind. The new build modern EP reactors such as that at Sizewell, and powered by turbines are significantly quieter, and when on site it is difficult to tell whether or not they are running. British Energy also confirmed that on-site light pollution would feature as part of the overall design within the planning considerations, but would be at a level that enabled safe operations.
- 7.6.3 It was agreed that the blight on the landscape would be greater during the period of construction, though following this, it would be difficult to evaluate whether there was a depression in local property prices as a result of the new build. The new build would not be like the current station, described as a brutal design from the 1960s, but would stand out on the local landscape similarly to Sizewell, though not much different in scale to the current Bradwell station.

7.6.4 ***The group concluded that any new build nuclear power station would be obtrusive to the residents of Mersea Island and surrounding areas, though it would be difficult to determine whether this would result in a depression in local property prices. It was noted that that the local population increased during the lifetime of the original station and current property prices compared favourably with those of other areas of the borough. It was further noted that should a planning application for a new build be forthcoming, Colchester, like Maldon District Council would as part of the planning process be a consultee to the new Infrastructure Planning Commission (IPC) and it would be at this point that the Council could consider the design and scale of any new build, and what could be done to mitigate against the potential obtrusiveness of the structure, and respond accordingly.***

7.7 Local benefits of a new build nuclear power station at Bradwell

7.7.1 The task and finish group deliberated this at length and unanimously agreed that in their opinion the only two benefits that could come from a new build at Bradwell are, i) in the short term, and primarily from within the Maldon District, an unquantifiable economic boost for local companies, businesses and job creation for the estimated five year duration of the build, and ii) in the long term, and primarily from within the Maldon district, any permanent local employment at the new power station, or additional local business that results from having a new power station.

7.7.2 The group also agreed that a Mersea – Bradwell ferry could provide some benefit to Mersea Island in the form of commuting, and also an impetus to win over some local sceptics. Other benefits were recognised but considered not to be of a specific local nature, but a national benefit that would form part of the national debate. It was understood that EDF (British Energy) are to undertake a study of the social and economic benefits to a new build nuclear power station that will underpin a planning application for the site.

7.7.3 ***The group concluded that whilst there are the two aforementioned benefits of a new build nuclear power station at Bradwell, these were of a far greater benefit to residents and businesses closer to the site by land and primarily within the boundaries of Maldon District Council, than they were to the residents of West Mersea. A local ferry between West Mersea and Bradwell may provide an employment impetus to Mersea Island, but to be realised would almost certainly rely upon independent private investment.***

8. Standard and Strategic Plan References

8.1 There are no policy plan references or financial, human rights, community safety or health and safety implications in this matter.

8.2 Scrutiny is a key function to ensure the decisions and policies of the Council and the performance of the Executive functions by the Council are subject to full appraisal and that they are in line with the aims of the strategic plan. The role of scrutiny is also an important part of our risk management, helping to check that risks are identified and challenged.

Childhood Cancer around specific nuclear installations – response from Dr David Irwin

I have been forwarded details of a statement the HPA's Radiation Protection Division prepared concerning the German study.

I have also been in contact with colleagues at the Committee on Medical Aspects of Radiation in the Environment (COMARE) who have advised me that the survey you suggest should be undertaken, has already been published by COMARE.

In 2005, at the request of the Department of Health, COMARE published its Tenth Report, which reviewed earlier evidence and presented new data relating to childhood cancers around nuclear installations in Great Britain. By doing this they have attempted to see if the claims of an excess of childhood cancer (0-15 year olds) around some specific nuclear installations are a regular feature of the majority of the largest nuclear sites in Great Britain.

The report concluded that no evidence of excess numbers of cases in any local 25 km area around nuclear power stations, which would include either primary exposure to radioactive discharges or secondary exposure from re-suspended material. This report puts various allegations of other cancer clusters around nuclear installations into context.

The 11th COMARE report shows that childhood leukaemia and many other types of childhood cancers do not occur evenly within the population of Great Britain. There are a variety of incidence rates in different geographical and social circumstances and that these differ more than would be expected from simple random or chance variations. This uneven distribution (or clustering) occurs at all levels of population distribution throughout the country, down to very local levels such as those of electoral wards. It is not known why childhood cancers tend to cluster like this. Much attention has been given to interactions between exposure to infections and immune responses. Other possible explanations have also been considered, including exposure to environmental agents. The analyses in this report have been carried out on the largest data set of childhood cancer cases ever compiled anywhere in the world. The very large data set gives considerable confidence in the results

To carry out the studies described in their 11th Report required a very large database. This was compiled over a considerable time scale. The database was constructed from the National Registry of Childhood Tumours by staff of the Childhood Cancer Research Group in Oxford. The current data set consists of 12,415 cases of childhood leukaemia and non-Hodgkin lymphoma (NHL) and 19,908 cases of children with solid tumours registered under the age of 15 in England, Wales and Scotland from 1969 to 1993 inclusive. As you can see this is a much larger data set than that used in the German studies and covers a much larger age range. In statistical terms this study is therefore more powerful than the German studies.

These reports are published in full on the COMARE web site www.comare.org.uk and hard copies can be obtained from the COMARE secretariat.

There is also a recent re-analysis of data on childhood leukaemia around nuclear power plants in England and Wales, undertaken in the light of the German study which can be found at: http://www.ncbi.nlm.nih.gov/pubmed/18936090ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

Childhood Cancer around Nuclear Power Plants in Germany

Two papers recently published in the peer-reviewed literature (1,2) and a more detailed report issued by the German Federal Office for Radiation Protection (3) describe a case-control study of childhood cancer conducted in the vicinity of nuclear power plants in western Germany. The studies follow two earlier geographical studies that examined childhood cancer rates around these plants. The original study (4) did not find a raised risk of cancer overall, or leukaemia specifically, at ages up to 15 years within 15 km of the nearest nuclear power plant during 1980-90. However, in the course of analysing subsets of the data, a statistically significantly raised risk of leukaemia at ages up to 5 years was found within 5 km of plants. A second geographical study (5), conducted using the same design but looking at the period 1991-95, did not find a statistically significantly raised risk within this subset, although the relative risk was greater than 1.

The new study was a case-control study, rather than a geographical correlation study. There were two aspects to the study. First, rather than classifying the child's place of residence at the time of diagnosis by administrative area, the proximity of this residence from the nearest nuclear power plant was determined more precisely by using the actual address. Secondly, information on potential risk factors was sought from the parents of sub-groups of cases and controls. However, the authors noticed that there was considerable self-selection on the part of those who agreed to be interviewed. Consequently, the findings from this part of the study were not used in the main analysis.

There is a considerable overlap between the time period for this study (ie. 1980-2003) and that for the previous geographical studies (ie. 1980-90 and 1991-95 respectively). As in the earlier studies, there was a statistically significantly raised risk of leukaemia at ages up to 5 years within 5 km of the nearest nuclear power plant (odds ratio 2.19, lower 95% confidence limit 1.51). Much of the evidence of this increase arose from the cases included in the previous studies, particularly over the period 1980-90, although there was some suggestion of an increased risk – but at a lower level – for the period 1996-2003, ie. following the earlier studies. More than 5km from the nearest plant, the odds ratio for leukaemia was very close to 1. As before, there was little evidence to indicate raised risks of other childhood cancers. Since this study was restricted to childhood cancers at ages up to 5 years, it did not provide information on childhood cancers at ages 5-14 years over and above that provided by the earlier studies.

The findings from this case-control study – based on a more precise measurement of the proximity of residences from nuclear power plants – largely agree with those from the earlier geographical studies in Germany. However, it should be stressed that:

- there is a large overlap between the cancer cases at ages under 5 years in this study and those in the earlier studies, and
- the focus on leukaemia at ages under 5 years within 5 km of a nuclear power plant arose from a *post hoc* analysis of data from the original study.

Whilst data for the period post-1995 also provide some evidence of a raised risk within this category, the strength of evidence and the level of risk appear to be lower. Furthermore, it was not possible from the questionnaire part of the study to determine whether other factors might explain these findings.

As the authors point out, studies conducted in other countries have generally not found raised risks of childhood cancer, or childhood leukaemia in particular, near nuclear power plants (6). This conclusion was drawn by COMARE (7) in its analysis conducted around nuclear plants in Great Britain. That analysis, as in most other analyses of this topic (including the original German studies), focussed primarily on cancers at ages up to 15 years. However, a sub-analysis specific to myeloid leukaemia at years up to 5 years around nuclear power plants in Great Britain again did not show raised risks (7). Amongst studies elsewhere, a study in France (8) gave a standardised incidence ratio for leukaemia at ages under 5 years of 0.97 (95% confidence interval 0.69-1.33) within 5 km of a nuclear site. This result was based on a similar number of cases to the German study (39 in the former study compared with 37 in the latter). Nevertheless, the two sets of findings are clearly discrepant.

COMARE (9) also examined the general pattern of childhood leukaemia and other childhood cancers within Great Britain. This analysis showed that rates of these diseases are not uniform, but rather that there is a general tendency for clustering to arise, more often than would be expected from chance alone. The reasons for these variations are not clear. However, the results from studies around nuclear installations should be viewed in the light of this non-uniformity in baseline rates of childhood cancer. The German study did not take account of any such variations.

The German study focussed on proximity to the child's residence at the time of diagnosis, rather than any measure of radiation dose. The authors note that annual doses to residents as a consequence of living near nuclear power plants in Germany are likely to be a factor of 1,000-100,000 times lower than those from background radiation. At these dose levels, no observable increase in childhood leukaemia would be expected based on knowledge of radiation carcinogenesis.

In conclusion:

- The new German study adds to the information on childhood cancer around nuclear installations;
- Studies conducted in Great Britain and other countries have generally not shown raised risks of childhood leukaemia near nuclear power plants, even though some of these studies are at least as large as that conducted in Germany;
- The increased risk reported in the new German study is heavily influenced by the same cases that had been identified in earlier German investigations as suggesting a raised risk of childhood leukaemia;
- The identification of a raised risk in the original German study arose from a *post hoc* decision to focus on cases at ages under 5 years within 5 km of a nuclear power plant; the more recent data provide less evidence of a raised risk in this category;
- A comprehensive study conducted in Great Britain has shown that childhood leukaemia and other childhood cancers have a general tendency to cluster; the Germany study did not include an adjustment for this or for other possible risk factors;
- Annual radiation doses due to living near nuclear power plants in Germany are likely to be a factor of 1,000-100,000 times lower than doses from background radiation; no observable increase in childhood leukaemia rates would be expected at these levels.

HPA
10 January 2008

