



## **APPLICATION BACKGROUND**

### **Site Description**

The application relates to part of Scottish Water's Airyhall Distribution Service Reservoir, located at Craigton Road, Airyhall.

The reservoir site extends to around 3.6 hectares and comprises an open area of grass which accommodates two below ground concrete water tanks. The northern tank, constructed in 1994 is rectangular in shape and is currently operational. The southern tank, constructed in 1866 is circular and is currently disused. Both are covered in grass and have flat tops. Two small service buildings are in the south west corner of the site. Vehicle access is taken from Craigton Road and there is a smaller personnel gate between the site and a lane behind Braeside Terrace.

The reservoir site is surrounded by residential properties, with the rear gardens of homes located on Craigton Road forming the northern boundary, alongside a gate which serves as the access into the site. The western boundary is formed by the rear gardens of homes on Northcote Avenue and one home on Airyhall Road. The southern boundary is shared with a rear lane (part of Core Path 67) which runs between the reservoir and the rear gardens of homes on Braeside Terrace. The southern portion of the eastern boundary is formed by the boundary with the former Braeside Primary School site, which is subject of development proposals to construct 30 houses (planning application 221310/DPP). The remainder of the eastern boundary is formed by the rear gardens of homes on Braeside Place and one on Craigton Road.

### **Relevant Planning History**

An EIA screening opinion request (221455/ESC) related to the proposal was received from Scottish Water in December 2022. It has been determined that the proposal is not an EIA development.

## **APPLICATION DESCRIPTION**

### **Description of Proposal**

Detailed planning permission is sought for the installation of two solar photovoltaic (PV) arrays and associated equipment.

The two arrays would comprise a combined total of 1,948 PV panels. The first array would be located on the grassed roof of the southern tank, covering an area of 3,286 sqm. The second would be on the grassed roof of the northern tank and cover an area of 1,746 sqm. The PV panels would be mounted on frames and have a maximum height of 0.33m above the top of the tanks.

Two service buildings housing equipment would be installed in the south west corner of the site. Each would be 5m long, 5m wide and with a flat roof of 2.5m in height. They would be constructed from green glass reinforced plastic. Underground cabling would link the solar arrays to the buildings and then into the electricity grid.

The remainder of the reservoir site (which is outwith the planning application boundary) would remain unaltered as grassland.

Scottish Water has indicated that the installation of the solar arrays would contribute towards its renewable energy installation programme, which is part of a nationwide programme to reduce its carbon emissions, increase energy security and reduce operational costs. Within the city, similar arrays are operational at Mannofield Waste Water Treatment Works on St John's Terrace and Pittfodels Reservoir off Countesswells Road to the west of the application site. These examples are primarily used to power operational activities at each site, so benefited from permitted development rights which Scottish Water as a statutory undertaker can utilise for operational development. In the case of this proposal however, energy generated would be exported to the national grid, so would not be operational development. It therefore require planning permission.

### **Amendments**

None.

### **Supporting Documents**

All drawings and supporting documents listed below can be viewed on the Council's website at:

<https://publicaccess.aberdeencity.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=RQH51FBZGTJ00>

- Preliminary Ecology Appraisal
- Supporting Statement and addendum

### **Reason for Referral to Committee**

The application has been referred to the Planning Development Management Committee because six or more representations that express objection or concern about the proposal have been received and the application is recommended for approval.

### **CONSULTATIONS**

**ACC – Roads Development Management Team** – The proposal is internal to a site owned by Scottish Water and would predominantly impact their inset road. There are no Roads concerns with this proposal.

**Braeside And Mannofield Community Council** – No response received.

### **REPRESENTATIONS**

Fifteen representations have been received. Fourteen object to the proposal and one supports it. The matters raised are summarised below –

#### **Principle**

- 1) Alternative locations have not been considered, such as the rooftops of buildings, which would be preferable to using an area of green space.

- 2) Individual landowners using their land to develop solar panels and green infrastructure is not the most ideal or sustainable approach to addressing climate change. A more collaborative approach is required.
- 3) Solar panels are costly with low efficiency, and they will eventually end up in landfill.
- 4) The long-term plans for the reservoir should be considered.
- 5) Scottish Water submitted the application when they know the site is not suitable for such a development

### **Natural Heritage**

- 6) The green space should be retained as it is.
- 7) Due to the isolated nature of the site, it has a diverse and undisturbed habitat which the introduction of solar panels would adversely effect, restricting wildlife such as foxes, deer, birds, badgers, and other animals that are known to use the site.
- 8) There would be a loss of carbon sequestration capacity by installation solar panels on the grass.
- 9) There is a contradiction in Scottish Water's aim to help achieve net zero and the impact on the biodiversity at the site that would result from installation the solar panels.
- 10) Who will be specifying the requirements for EIA and when will it be available?
- 11) Is the capital energy input required to manufacture and transport the panels taken into consideration when evaluating their environmental impact and green credentials?

### **Residential Amenity**

- 12) There would be an adverse visual impact, the solar panels would dominate views from the rear of homes surrounding the site and have an industrial character.
- 13) Trees should be planted to screen the solar panels.
- 14) The panels would need removed anytime maintenance is carried out on the reservoirs, causing disturbance.
- 15) The panels would cause glare and light reflection.

### **Health and Safety**

- 16) There is a risk of the solar panels catching fire and subsequent contamination of water supply.
- 17) There is a risk that the panels are uplifted and blown away by storms.
- 18) The solar panels are at risk of damage from fireworks let off by surrounding residents.
- 19) Children can be seen playing in the site on occasion and the solar panels would present a risk to them.
- 20) Construction vehicles accessing the site would cause problems with safety on Craigton Road.

### **Other**

- 21) Work appears to have already commenced at the site.
- 22) Previous work carried out by Scottish Water at the Airyhall reservoir has been carried out in a reckless manner, including flooding of the surrounding area and mud/debris being left on the road.
- 23) Construction and maintenance of solar installations at other Scottish Water sites has been undertaken in an unprofessional and unsafe manner with poor workmanship.
- 24) Would the reservoir be able to accommodate the weight of the solar panels?
- 25) There are no details of how electricity would be exported from the site

- 26) The installation of the panels could result in flooding as the area of grass would be reduced.
- 27) Where are the solar panels manufactured?
- 28) Are there recycling facilities for solar panels in Scotland?

### **Administrative**

- 29) Scottish Water did not consult neighbours in identifying the site for solar panels.

## **MATERIAL CONSIDERATIONS**

### **Legislative Requirements**

Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that where making any determination under the planning acts, regard is to be had to the provisions of the Development Plan; and, that any determination shall be made in accordance with the plan, so far as material to the application, unless material considerations indicate otherwise.

### **Development Plan**

#### National Planning Framework 4

National Planning Framework 4 (NPF4) is the long-term spatial strategy for Scotland and contains a comprehensive set of national planning policies that form part of the statutory development plan. The relevant provisions of NPF4 that require consideration in terms of this application are –

- Policy 1 (Tackling the Climate and Nature Crises)
- Policy 3 (Biodiversity)
- Policy 4 (Natural Places)
- Policy 11 (Energy)
- Policy 22 (Flood Risk and Water Management)
- Policy 23 (Health and Safety)

#### Aberdeen Local Development Plan (2023)

The following policies are relevant –

- Policy H1 (Residential Areas)
- Policy NE3 (Our Natural Heritage)
- Policy NE4 (Our Water Environment)
- Policy R7 (Renewable and Low Carbon Energy Developments)

### **Interim Aberdeen Planning Guidance and Technical Advice Notes**

Aberdeen Planning Guidance is Interim Planning Guidance. The documents hold limited weight until they are adopted by the Council. The weight to be given to Interim Planning Guidance prior to its adoption is a matter for the decision maker. The following guidance is relevant –

- Natural Heritage
- Flooding, Drainage and Water Quality

## **EVALUATION**

### **Principle of Development**

Policy 11 (Energy) of National Planning Framework 4 (NPF4) seeks to encourage, promote, and facilitate all forms of renewable energy development onshore and offshore. It states that development proposals for all forms of renewable, low-carbon and zero emissions technologies, which includes solar arrays, will be supported.

Policy R7 (Renewable and Low Carbon Energy Developments) of the Aberdeen Local Development Plan (ALDP) also encourages and supports renewable and low carbon energy schemes in principle, where the technology can operate efficiently, and the environmental and cumulative impacts can be satisfactorily addressed.

Policy 1 (Tackling the Climate and Nature Crises) of NPF4 requires that when considering all development proposals, significant weight will be given to the global climate and nature crises. On this basis, the principle of the proposed solar array is lent substantial support by these policies.

These policies establish that the principle of renewable energy developments, such as the proposed solar array, is acceptable and indeed are lent substantial support by both national and local policy.

Policy 11 of NPF4 goes on to say that development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business, and supply chain opportunities. Given the relatively simple process of installing solar arrays, the opportunities for local and community socio-economic benefits such as employment, associated business and supply chain opportunities are limited. There would appear to be only one manufacturer of PV panels in the UK based in Wales and Scottish Water advise that the specified panels would be sourced from China. In 2021, China accounted for 75% of global PV panel production, with Europe producing 0.9%, so the opportunity to obtain from local suppliers is very limited. The other matters related to local, and community socio-economic benefits apply more to wind farm and other large scale renewable projects.

There is no requirement for the applicant to consider alternative locations. However, Scottish Water has advised that the Airyhall reservoir was selected after a thorough appraisal as it is a large area of land with no shading issues (for example surrounding tall trees or buildings) and the tank tops have a substantial surface area which is ideal for tank mounted arrays (*issue 1 in representations*).

### **Project Design and Mitigation**

Policy 11 of NPF4 also requires the project design and mitigation to demonstrate how the following impacts are addressed. Many of these matters are aimed more towards considering large scale renewable projects, such as wind farms, nonetheless each is considered in relation to this application. Policy R7 of the ALDP also contains such criteria, much of which reiterates that in Policy 11. Where Policy R7 has additional requirements, they are highlighted in the relevant part of the discussion or considered at the end of this section.

In considering all these impacts, Policy 11 requires significant weight to be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. The significant weight required to be given to the global climate and nature crises by Policy 1 of NPF4 must also be considered. This substantial support for the

principle of the development should not be outweighed by other matters unless it can be demonstrated that significant harm would be caused.

*i. impacts on communities and individual dwellings, including, residential amenity, visual impact, noise, and shadow flicker.*

At present houses surrounding the reservoir site have open views across it. The PV panels would be located on the top of the tanks and would have a maximum height of 0.33m above them. The northern array would be closer to homes than the southern, with the closest part of the array being 11m away from the rear garden fences of homes on Craigton Road; 50m from those on Braeside Place and 33m from those on Northcote Avenue. The southern array would be 47m from the garden fences of homes on Northcote Avenue; 65m from those on Braeside Terrace and 50m from those on Braeside Place.

The overall reservoir site area is 36,149 sqm. With the two arrays covering a total of 5,032 sqm, only 14% of the site would be covered, leaving 86% uncovered. Due to the openness of the site, the arrays would be noticeable from the back of many of the houses that surround it, apart from homes on Braeside Terrace on the south side of the site, due to the screening effect of the topography within the site. Many houses sharing a boundary with the reservoir site have natural boundary screening such as hedges or some standard height solid garden fences. Views of the arrays would therefore generally be limited to being from the upper storeys of houses. Those houses that have lower, or more open mesh fences, would likely be able to see the arrays from ground floor or gardens. However, with a large proportion of the site remaining uncovered and the arrays being set off the site boundaries by varying distances, a reasonable buffer would be provided between the rear boundaries of houses and the arrays. Any visual impact would also be limited due to the low profile of the PV panels (33cm), which would allow views across to the opposite side of the reservoir site to still be available. It is acknowledged that the view experienced by residents over the reservoir site would alter and that the change from what is principally a green field to one with equipment on it, would generally be considered a negative one by most people. However, due to the low profile of the panels, large areas of the site which would remain uncovered and the distance between the arrays and houses, the degree of visual impact would not be significant. Whilst the planning system should protect against unreasonable impingement upon the outlook available from someone's home, there is no right to a particular view and within a suburban context change is to be expected over time.

It is also important to note that the test within Policy R7 of the ALDP is that *"proposals will not have a significant adverse impact on the amenity of dwelling houses."* In this case, although there would be an impact upon visual amenity, it would be minor, rather than being significant.

The low profile of the arrays would also ensure there would be no impact on daylight availability or overshadowing for surrounding homes.

There would be no noise or shadow flicker generated by the solar arrays.

In terms of the two service buildings, these would be located beside existing buildings in south east corner of the site, adjacent to the boundary with former Braeside Primary School site. Being only 2.5m in height, they would have no adverse impact upon the amenity of the area. Underground cables would connect the arrays with the new service buildings, where a connection would be made into the wider electricity grid (*issue 25 in representations*).

Therefore, whilst there would be a change in the outlook for residents located around the reservoir, it is not considered this would be significantly detrimental to amenity (*issue 12 in representations*).

- ii. *significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable.*

As discussed in section i above, the visual impact would be localised to the houses around the site. Views from public areas into the site are limited to from the rear lane which runs between the reservoir and the rear gardens of homes on Braeside Terrace. However, from here, due to topography within the site, the arrays are very unlikely to be seen. Otherwise, the only other public view into the site is from the gap between houses on Craigton Road which provides an access route into the site. Any views of the arrays from this location would be over from over 80m away, resulting in the visual impact being minor.

Given the insignificant impact it is not considered necessary to require tree planting to screen the arrays (*issue 13 in representations*).

- iii. *public access, including impact on long distance walking and cycling routes and scenic routes.*

As an operational reservoir, there is no public access to the site at present and this would remain the case. The core path along the outside of the southern boundary would remain unaffected.

- iv. *impacts on aviation and defence interests including seismological recording.*

No impacts on aviation or defence interests are expected.

- v. *impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised.*

No impacts on telecommunications and broadcasting installations are expected.

- vi. *impacts on road traffic and on adjacent trunk roads, including during construction.*

Although there would inevitably be construction traffic associated with the installation of the arrays, this is not expected to be significant. Operationally, only occasional maintenance vehicles would be required to attend the arrays. The ACC Roads Development Management Team was consulted and no concerns have been raised (*issue 20 in representations*).

- vii. *impacts on historic environment.*

The site is not within a conservation area and there are no historic assets, such as listed buildings or scheduled monuments, either within the site or in the surrounding area that would be affected by the proposed development.

- viii. *effects on hydrology, the water environment and flood risk.*

Policy 22 (Flood Risk and Water Management) of NPF4 expands on these matter and aims to strengthen resilience to flood risk by promoting avoidance as a first principle and reducing the vulnerability of existing and future development to flooding. Policy NE4 (Our Water Environment) of the ALDP has similar provisions.

At present rainwater falls onto the grass on top of the reservoir and drains naturally into the ground or is collected in a chamber which discharges into the sewer network. With the panels being on metal frames, a 40cm spacing between the panel rows and an 11-degree tilt on the panels, rainwater run-off hitting the panels would continue to freely drain to the ground below which will remain grassed (*issue 26 in representations*).

No other impacts upon hydrology, the water environment and flood risk have been identified.

ix. *biodiversity including impacts on birds.*

Policy 4 (Natural Places) of the ALDP aims to protect, restore, and enhance natural assets making best use of nature-based solutions. It states that development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported. Policy NE3 (Our Natural Heritage) of the ALDP has similar provisions.

A significant number of the representations received express concern that biodiversity would be affected by the development. In response, officers asked the applicant to carry out an ecological walkover survey, which was conducted in April 2023. The survey describes the site as being dominated by open grassland habitat, a diverse selection of herbage with areas of marshy grassland, sedges, and rush. Other than the grassland, there are the 19 self-seeded trees. There are no statutory or non-statutory natural heritage designations covering the site.

In terms of species, partial excavations, foraging holes and burrows are present throughout the site, likely associated with rabbit, field vole and rat activity. Foraging pathways are present around the edge of the site, likely attributable to foxes and hedgehogs. Residents also indicate in representations that deer, badgers, and a variety of birds have been noted at the site. However, the survey found no evidence of badger or their setts, or any related to other protected species (*issue 7 in representations*).

The PV panels would sit on metal frames, with the grass below remaining underneath. Each row of PV panels would be separated by 40cm gaps and there is a gap beneath the panels, allowing for birds and other small animals to travel between the panels. The grass in the remainder of the site would be retained as it is at present. Concern is raised in representations that the installation of the PV arrays would reduce the ability of the grass to absorb carbon dioxide from the atmosphere, a process known as carbon sequestration. As already described, the panels would sit on frames covering the grass, rather than the grass being removed. In response, Scottish Water advise that the lifecycle emissions for each project are closely considered, with approximately a 51 times higher carbon saving from the project than the estimated sequestration potential of the grass areas to be covered (*issue 8 in representations*).

Given that the foraging paths and burrows associated with mammals largely relate to areas towards the edge of the site, where no works other than the small service buildings are proposed, there is unlikely to be any significant impact upon the species identified as a

result of the development. Scottish Water also advise that on their other sites where similar installations are present, birds have been attracted to the arrays as they provide safe areas to shelter and nest, so the potential exists for there to be a positive benefit to birds as a result of the development. Similarly, as the grass between and around the panels would be left to grow for longer, rather than being cut short if the arrays were not present, this could provide improved habitat for butterflies, insects, reptiles, small mammals, and amphibians.

In summary, the biodiversity value of the site is fairly limited, and this would not change because of the development. There would be no significant change in the capacity of the site to support the species that do use it. Its function as a green space would be retained (*issue 6 and 9 in representations*).

x. *impacts on trees, woods and forests.*

There are nineteen self-seeded young rowan, ash, and hawthorn trees growing on the tank roof. A few small shrubs and middle-aged sycamore trees are found along the site's southern boundary.

The trees on the reservoir would require to be removed to allow for the installation of the arrays. The trees are young and their contribution to biodiversity or visual amenity is limited. The proposed development aside, the trees on the tank roof will need to be removed by Scottish Water during the next reservoir maintenance programme, as they could compromise the integrity of the tank if left to grow.

Although several small trees would be removed, their loss would not be significant either in terms of either what they contribute visually or to biodiversity.

xi. *proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration.*

The panels are designed to operate for 25 years, after which they would be removed. The installation of the arrays would not require a significant physical intervention, so their removal would also be a relatively simple process.

xii. *the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and*

Due to the simple reversible nature of the installation, it is not considered necessary to have any site restoration plan. However, a condition is proposed which requires the panels to be removed once they are no longer operational.

xiii. *cumulative impacts.*

There are no other developments in close proximity which in combination with this development would generate any unacceptable impacts.

In addition to the matters covered by both Policy 11 of NPF4 and Policy R7 of the ALDP above, Policy R7 also requires that proposals for all energy developments –

i. *will not negatively impact on air quality.*

The arrays would not emit any emissions and their use in the wider scale would help reduce emissions and in turn air quality from non-renewable energy sources.

*ii. will not negatively impact on tourism*

There are no tourist activities associated with the site or surrounding area.

In relation to solar energy developments specifically, Policy R7 requires proposals to meet the following requirements –

*i. consideration has been given to glint and glare issues and it has been demonstrated that any significant impacts will have a duration of less than five minutes in any one day.*

Scottish Water advise that the proposed panels are designed to absorb light as efficiently as possible. Modern mono-crystalline solar panels use anti-reflective coatings designed to reduce reflected light to less than 2%, which is essential if a high efficiency is to be achieved. Any reflected light represents energy not being converted to electricity, so panel design is optimised to capture as much light as possible. As a comparison, solar panels reflect slightly more light than black asphalt; about the same as bodies of water; and significantly less than bare soil, vegetation, concrete, rooftops, glass, snow, or metal. On that basis, it is considered that it is highly unlikely that glint and glare would arise as a concern (*issue 15 in representations*).

*ii. Low impact vegetation management can be achieved (grazing).*

As an operational reservoir site, no grazing of animals takes place.

In summary, both Policy 11 of NPF4 and Policy R7 of the ALDP require decision makers to give significant weight to the benefit which the development of renewable energy project in terms of reducing carbon emissions. It is considered that the criteria contained within Policy 11 in terms of potential impacts because of the development have been satisfactorily addressed and that any impact as a result of the proposal would be localised and minor. None would outweigh the significant weight which should be attached to the benefit of reducing carbon emissions.

## **Land Use Zoning**

The site is within an area zoned as residential where Policy H1 (Residential Areas) of the ALDP applies. Policy H1 states that within existing residential areas, proposals for non-residential uses will be supported if:

1. they are considered complementary to residential use; or
2. it can be demonstrated that the use would cause no conflict with, or any nuisance to, the enjoyment of existing residential amenity.

A solar array is not considered to be inherently incompatible with residential use and matters relating the residential amenity have been considered earlier in the report.

The primary use of the site would remain as a reservoir. Going forward, Scottish Water advise that inspection and cleaning of in-service tanks occurs over a five-year cycle. In the main, this will not require removal of panels located on the roof as most testing can be carried out from and around the access hatches, which are given a suitable clearance zone in the solar panel array designs. Therefore, the operation of the reservoir would not be compromised by the presence of the arrays.

## Health and Safety

Policy 23 (Health and Safety) of NPF4 requires development proposals to be designed to take into account suicide risk. There are no features apparent within the proposals which would increase the risk of suicide occurring.

Other matters related to health and safety were raised in representations and are addressed below.

- *There is a risk of the solar panels catching fire and subsequent contamination of water supply (issue 16 in representations).*

The safe operation of the PV arrays is a matter for the applicant and is controlled under separate regulations and standards; it is not a material planning consideration. However, Scottish Water has advised that the installation would be carried out by professional installers in accordance with the relevant regulations and standards. Among other system elements, the connections between panels are regularly checked as part of site maintenance, which is carried out by a specialist contractor. In the extremely unlikely event of fire, no contamination of the water supply could occur because of solar panel damage as the tank is constructed of thick concrete and fully sealed. Scottish Water's priority is to deliver a secure and safe water supply and activities that could put that at risk would not be permitted under their own risk assessment processes

- *There is a risk that the panels are uplifted and blown away by storms (issue 17 in representations).*

The safe operation of the arrays is a matter for the applicant and not a material planning consideration, as it is controlled under separate regulations and standards. Scottish Water has advised that a wind loading assessment was carried out and confirmed as satisfactory. The panels would be secured against wind by ballast and secure mounting systems.

- *The solar panels are at risk of damage from fireworks let off by surrounding residents (issue 18 in representations).*

The safe use of fireworks is the responsibility of those using them. It would be unreasonable to refuse a planning application on the basis that a third party might act in what could be considered a reckless manner. Scottish Water advises it will be vigilant for any future firework related damage at the reservoir.

- *Children can be seen playing in the site on occasion and the solar panels would present a risk to them (issue 19 in representations).*

Security of the site is a matter for Scottish water and not a material planning consideration. Scottish Water advise that concerns about unauthorised access will be raised with its security team and consideration as to whether any improvements are required, such as fence reinforcement or CCTV. The reservoir tanks have secure, alarmed access hatches. The solar panels would not present a risk to unauthorised persons as any tampering would be detected by the monitoring and protection systems in place in the solar circuit, resulting in safe disconnection.

## Other matters raised in representations

Taking the remaining representations that have not be addressed already in turn –

- *Individual landowners using their land to develop solar panels and green infrastructure is not the most ideal or sustainable approach to addressing climate change. A more collaborative approach is required (issue 2 in representations).*

Matters relating to wider energy strategy are not material to the determination of this application. The principle of solar energy development is strongly supported by national and local planning policy.

- *Solar panels are costly with low efficiency, and they will eventually end up in landfill (issue 3 in representations).*

*Are there recycling facilities for solar panels in Scotland (issue 28 in representations)?*

The cost of the project is a matter for the applicant and not a material planning consideration. Scottish Water advises that the recycling of PV panels returns at least 95% of the materials, which can then be used for manufacturing new panels.

At present there would only appear to be one firm recycling PV panels within the UK. Scottish Water advise that recycling would be handled as locally as possible when the system reaches the end of its life.

- *Scottish Water submitted the application when they know the site is not suitable for such a development (issue 5 in representations).*

Scottish Water consider that the site is suitable for the proposal and this view is shared by the planning service.

- *Who will be specifying the requirements for Environmental Impact Assessment (EIA) and when will it be available (issue 10 in representations)?*

Environmental Impact Assessment (EIA) is a means of drawing together, in a systematic way, an assessment of the likely significant environmental effects arising from a proposed development. Generally, EIA applies to small number applications, typically large developments or where particular environmental impacts are anticipated. This proposal is considered as a 'Industrial installations for the production of electricity, steam and hot water' that is over 0.5 hectares' so is a schedule 2 development under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017). Schedule 2 developments must be screened to determine whether EIA is required, therefore Scottish Water submitted an EIA screening opinion request (ref: 221455/ESC) to the Council. The planning service determined that there would not be a significant effect on the environment, therefore no EIA is required. Individual matters related to the environmental impact of the development have been considered above.

- *Is the capital energy input required to manufacture and transport the panels taken into consideration when evaluating their environmental impact and green credentials (issue 11 in representations)?*

As discussed earlier in the report, the direct impact of the development on the local environment is very low. On a broader level, materials and energy will be used to manufacture, transport, and install the equipment, however this is the case for any development and must be balanced against the benefit a development would realise. In this case, there is a clear benefit from generating renewable energy, the principle of which gains strong support from national and local planning policy. Scottish Water has advised that the PV panels reach carbon 'breakeven' within one to three years, with a carbon negative result for the remainder of their lifespan, which is generally 25 years. Based on that lifespan, the annual carbon saving from the Airyhall project is expected to be 140 tonnes per year, resulting in a total project saving across the remaining 22 years of 3,080 tonnes.

- *Construction vehicles accessing the site would cause problems with safety on Craigton Road (issue 20 in representations).*

Construction traffic would utilise the existing vehicle access onto Craigton Road. No concerns with this arrangement have been raised the Council's Roads Development Management Team. Scottish Water advise that drivers would be briefed about the school crossing and any other risks. The site will require deliveries of materials but once these deliveries are completed, there will be limited traffic in the way of heavy goods vehicles. There will be very limited earth moving activity required for cable trenches within the site, but no earthworks material is expected to leave site.

- *Work appears to have already commenced at the site (issue 21 in representations).*

Scottish Water has confirmed this is not the case and that the works which appear to be being referred to are normal operational activities to maintain and repair the site.

- *Previous work carried out by Scottish Water at the Airyhall reservoir has been carried out in a reckless manner, including flooding of the surrounding area and mud/debris being left on the road (issue 22 in representations).*

*Construction and maintenance of solar installations at other Scottish Water sites has been undertaken in an unprofessional and unsafe manner with poor workmanship (issue 23 in representations).*

The manner in which work is carried out by the applicant, or its contractors is a matter for the applicant and not a material planning consideration. Scottish Water advise their contractor would be tasked with delivering a safe and high-quality installation. Scottish Water would be on site to closely monitor construction as it progresses

- *Would the reservoir be able to accommodate the weight of the solar panels (issue 24 in representations)?*

The ability of the reservoir to accommodate the solar panels is not a material planning consideration as it would be controlled under separate regulations and standards. However, Scottish Water advise the structures have been surveyed independently to confirm their ability to support the added weight of the panels and the outcome was that there is sufficient load bearing capacity.

- *Scottish Water did not consult neighbours in identifying the site for solar panels (issue 29 in representations).*

There is no requirement for the applicant to carry out pre-application public consultation before applying for a local development. Notwithstanding, prior to submitting the planning application, Scottish Water wrote to 76 local properties to provide information about the proposals. Contact was received from three separate households, with one supportive and two seeking clarifications. Scottish Water consider comprehensive efforts were made to answer any questions fully and transparently.

## **RECOMMENDATION**

Approve Conditionally

## **REASON FOR RECOMMENDATION**

Policy 11 (Energy) of National Planning Framework 4 (NPF4) and Policy R7 (Renewable and Low Carbon Energy Developments) of the Aberdeen Local Development Plan (ALDP) require decision makers to give significant weight to the benefit which development of renewable energy projects will bring in terms of reducing carbon emissions. This is echoed by Policy 1 (Tackling the Climate and Nature Crises) of NPF4 which requires significant weight to be given to the global climate and nature crises when determining all applications. The principle of the proposed solar array is therefore lent substantial support by these policies.

It is acknowledged that the view experienced by residents over the reservoir site would be altered. However, due to the low profile of the panels, the large areas of the site which would remain uncovered and the distance between the arrays and houses, the degree of visual impact would not be significant. The visual impact would be localised to the houses around the site, with views from public areas into the site being limited.

The biodiversity value of the site is fairly limited, and the development would not adversely affect this. The potential exists for the development to be beneficial to species using the site, as the solar arrays can provide safe areas for birds, butterflies, insects, reptiles, small mammals, and amphibians. Therefore, there would be no conflict with Policy 4 (Natural Places) of NPF4 or Policy NE3 (Our Natural Heritage) of the ALDP.

All other matters raised, including those relating to health & safety, residential amenity, and drainage, have been satisfactorily addressed or are outside the scope of determining this planning application. None of the matters would outweigh the support that applies to renewable energy projects in national and local planning policy and therefore it is considered the proposal is in accordance with the development plan.

## **CONDITIONS**

### (01) DURATION OF PERMISSION

The development to which this notice relates must be begun not later than the expiration of 3 years beginning with the date of this notice. If development has not begun at the expiration of the 3-year period, the planning permission lapses.

Reason - in accordance with section 58 (duration of planning permission) of the 1997 act.

## (02) SITE RESTORATION

On the solar arrays hereby approved no longer being used for the purposes of generating electricity, (i) the planning authority must be notified; and (ii) within six months the solar arrays and supporting frames shall be removed from the site and land restored to its condition before the development took place or such other state as may be agreed with the planning authority.

Reason – to minimise unnecessary visual intrusion for surrounding residents.

## **ADVISORY NOTES FOR APPLICANT**

### (01) HOURS OF DEMOLITION AND CONSTRUCTION WORK

Unless otherwise agreed in writing with Aberdeen City Council Environmental Health Service (poll@aberdeencity.gov.uk / 03000 200 292), demolition or construction work associated with the proposed development should not take place out with the hours of 07:00 to 19:00 Mondays to Fridays and 08:00 to 13:00 on Saturdays. No noisy work should be audible at the site boundary on Sundays.

Where complaints are received and contractors fail to adhere to the above restrictions, enforcement action may be initiated under the Control of Pollution Act 1974.