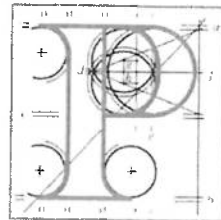


Our Case Number: ACP-323980-25



**An
Coimisiún
Pleanála**

James Crowley
Carrigdangan
Gyleen
Whitegate
Co. Cork
P25 WY43

Date: 13 August 2026

Re: Proposed Water Supply Project for the Eastern and Midlands Region
in the counties of Clare, Limerick, Tipperary, Offaly, Kildare, and Dublin.

Dear Sir / Madam,

An Coimisiún Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

Please be advised that those who have already paid €50 are not required to pay a €50 fee at this time, a refund will be issued to the debit/credit card used to make payment for this submission.

More detailed information in relation to strategic infrastructure development can be viewed on the Commission's website: www.pleanala.ie.

If you have any queries in the meantime please contact the undersigned officer of the Commission. Please quote the above mentioned An Coimisiún Pleanála reference number in any correspondence or telephone contact with the Commission.

Yours faithfully,

Lauren Griffin
Executive Officer
Direct Line: 01-8737244

PA04

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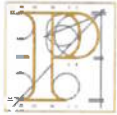
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An
Coimisiún
Pleanála

SID Online Observation

Online Reference
SID-OBS-005793

Online Observation Details

Contact Name
James Crowley

Lodgement Date
21/07/2026 17:00:07

Case Number / Description
323980

Payment Details

Payment Method
Online Payment

Cardholder Name
James Crowley

Payment Amount
€50.00

Fee Refund Requisition

Please Arrange a Refund of Fee of

€ 50.00

Lodgement No

LDG— 089955-26

Reason for Refund

No fee for second round submission

Documents Returned to Observer

☐

Yes

☒

No

Request Emailed to Senior Executive Officer for Approval

☒

Yes

☐

No

Signed

Lauren affr

EO

Date

13/8/26

Finance Section

Payment Reference

ch_3Tvg5TB1CW0EN5FC1p3jUFFi

Checked Against Fee Income Online

EO/AA (Accounts Section)

Amount

€

Refund Date

Authorised By (1)

SEO (Finance)

Date

Authorised By (2)

Chief Officer/Director of Corporate Affairs/SAO/Board
Member

Date

21st July, 2026

Strategic Infrastructure Development Section

An Coimisiún Pleanála

64 Marlborough Street

Dublin 1 D01 V902

Via Email: sids@pleanala.ie

Re: Additional Submission on Uisce Éireann's Response to Submission Report for Water Supply Project (Eastern and Midlands Region) Strategic Infrastructure Development Application - Submission #50, ABP Case number: ACP-323980-25

To whom it may concern,

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Considering the flows in the River Shannon, the abstraction of up to 3.47 m³/s may seem insignificant to Uisce Éireann (2% of the total average flow rate of approx 200 m³/s) when expressed as a percentage of the long-term average flow at Parteen. **I find this and the continued responses related to abstraction of Uisce Éireann highly misleading.** I and others understand that during periods of 'extreme' drought, this abstraction critically deplete flows in the River Shannon resulting in a variety of significant impacts.

The Shannon river is a highly modified river system controlled primarily by the century old Ardnacrusha HEPS. Ardnacrusha produces only about 1% of the nation's electricity. It appears that the value of Ardnacrusha HEPS is now only equivalent to small number of wind turbines. The value of the Pipeline Project far exceeds the value of Ardnacrusha HEPS. In many parts of the world old dams, such as Ardnacrusha, are being removed. I believe that it is imprudent for ACP to

consider this Strategic Infrastructure Development Application until a complete assessment of the removal of Ardnacrusha and the full restoration of the Shannon River is completed. This may allow for more efficient and smaller footprint hydro power facilities to be constructed that better align with the national grid. **Moving forward on the Pipeline Project literally cements Ardnacrusha into continued operation for the long future by ESB as they are needed to manage flows in the artificial Parteen Basin. Clearly there is a massive oversight (legal, policy, and procedural) for this to happen without appropriate review.**

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Debasement of Our Deeply Sacred River – An tSionainn

My first observation was that the Proposed Pipeline Project represented the debasement of the deeply sacred River Shannon (An tSionainn) by a "Take" of water. Uisce Éireann argues that this take (abstraction) is not significant - but it's significant enough for this proposed pipeline project to solve the water supply crisis the Greater Dublin area faces. The significance of the Take (abstraction) is the major point of contention in the Report summary of submittal observations especially during an extreme drought.

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Uisce Éireann did not appropriately address the cultural significance issue I raised and the high cultural value of An tSionainn to the Irish people. The Environmental Impact Assessment Report (EIAR) defines cultural heritage narrowly—in terms of archaeology and protected structures—while failing to assess impacts on the river's intangible mythological and cultural heritage. This is a significant omission. **The Shannon river is not merely a physical resource; it is a living mythological and cultural entity.** The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, to which Ireland is a signatory, recognises the importance of such living heritage to community identity.

Uisce Éireann treats An tSionainn solely as a raw water source—a commodity to be abstracted. Nowhere is there consideration of the river's intrinsic right to flow, to maintain its ecological integrity and retain its deeply sacred place and status within our culture. This cannot be simplified as an ecological question; it is a question of how we value the natural world and cultural continuity in our planning decisions. International precedent, includes the recognition of legal personhood for rivers such as the Whanganui in New Zealand, the Yarra in Australia, and the

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I continue to urge An Coimisiún Pleanála to find the application deficient and to use their leadership in planning to direct Uisce Éireann and others in the future to deeply consider the impact of SID projects on the intangible cultural heritage Ireland's rivers, mountains, bays, and other natural resources.

The Take (Abstraction) of the River Shannon's Water

The application is based upon a projected peak raw water take (I will refer to the abstraction term in the rest of my letter for clarity with the Report) of 300Mld (3.47 m³/s) at the year 2050 in the EIAR. Although this peak abstraction rate is envisaged to be approached during periods of major drought in the east there are no real limits as to how much Uisce Éireann will abstract other than pipeline capacity and what limitations would be imposed in the event of a major drought in the Shannon Basin.

The operation of Ardnacrusha Hydroelectric Power Station (HEPS) is the dominant controlling factor related to flows in the Shannon for the last 100 years. The application by Uisce Éireann does not specifically outline what measures are undertaken for the Ardnacrusha HEPS and how specifically they relate to the waterbodies currently affected by the abstraction and impoundment for the Ardnacrusha HEPS.

Uisce Éireann argues that during extreme drought conditions this would not be 30% or greater of the flow in the Shannon River and thus we see a classic 'apples versus oranges' conundrum regarding the language used to describe the highly modified river system. This highly modified river system is controlled primarily by the century old Ardnacrusha HEPS with the majority of the highly managed flows at diverted into the headrace canal to supply the Ardnacrusha hydro station and a statutory "absolute minimum compensation flow" of 10 m³/s goes down the Old Shannon channel that is required by law to prevent total ecological collapse of the riverbed.

Uisce Éireann argues that the abstraction does not significantly impact flow in the Old Shannon Channel because the flow would come from the normal operation of the Parteen Basin. Parteen Basin is considered a flowing water body (a pass through regulatory basin) where the exact amount of water present is constantly changing based on its flow rate. The Parteen Basin is generally considered to have no defined range of stored water because it does not actively store or retain water. They argue that their climate and hydrological modeling in the Environmental Impact Assessment Report (EIAR) shows that even during severe droughts (similar to 2018), water levels inside the basin will remain within their normal operating band. This band is an elevation difference of **1.30 metres** that the Electricity Supply Board (ESB) uses to manage water flow into

both the Ardnacrusha hydroelectric power station headrace canal and the lower River Shannon channel.

The total volume in this normal band in Parteen Basin is equivalent to two weeks of peak flow in the proposed pipeline Eastward from the Shannon. Uisce Éireann states that the ESB manages the flows in Parteen and that their abstraction would not change ESB's operating regime with water used for hydroelectricity instead being diverted Eastward into the pipeline. The ESB works to keep the surface levels of Lough Derg within a standard window to balance electricity production, navigation, and environmental safety. ESB would now also have to balance flows to Uisce Éireann. ESB has no direct influence on flows from Lough Derg to Parteen Basin other than the controls in the lower basin. The water flow from Lough Derg to Parteen Basin is restricted by the flow capacity of the outlet channel at Killaloe but cannot directly manage this flow. Bottomline here appears to be that Uisce Éireann is relying on operational storage within the operating band ESB manages for both Parteen and Lough Derg even though ESB explicitly states that it does not store any water. However, in an extreme drought with Lough Derg elevations lowered, despite the assertions of Uisce Éireann, I believe the impact of their abstraction will be significant.

There is a fundamental and inadequately assessed risk at the heart of this pipeline project: the assumption that the Shannon has a permanent surplus of water that can be safely abstracted, even during extreme future drought conditions. Uisce Éireann's assumption is flawed and climate change significantly exacerbates extreme drought and hydrological conditions. Uisce Éireann's modelling assumes no significant impact due to two historic drought scenarios (1995 and 2018) based upon modelling. The Report does not provide a sufficient robust response to reassure the public or the Commission that the risk has been properly addressed despite extensive modelling. Their reliance on the 2% as a de minimis significance level is highly misleading.

LOSS OF ECOLOGICAL RESILIENCE

The take (abstraction) of up to 300 million litres per day is stated to represent only 2% of the long-term average flow at Parteen. This statistic is misleading because it masks the critical question: *what percentage of the flow will be taken during the lowest recorded flows, or during future droughts intensified by climate change?* The lack of clarity around the issue of take (abstraction) reflects poorly on Uisce Éireann as does the representation that 2% of the long-term average flow is not significant. Uisce Éireann refers to ESB flows and their management to always manage the minimum flow at 10 cubic meters per second. at Parteen.

It appears that Uisce Éireann will need to apply to the Environmental Protection Agency (EPA) for a large-scale abstraction licence, and that process will define constraints during low flows. However, the Report does not provide clarity on this process, how the ESB will be involved, and what potential constraints should be considered. This is a material omission. Low flows and dropping of levels in Lough Derg have significant impacts. Already, significant algae blooms are

common in Lough Derg during low flow conditions. Until the licensing process and long term operational contracts with ESB are complete and enforceable limits are set, we have to conclude that there is a risk that the abstraction could represent a very high percentage—or even all—of the flow in the Shannon downstream of the Parteen basin during extreme future drought.

I did not get an appropriate response to the fact that the pipeline project's own operational requirements compound this risk. The proposed pipeline cannot be left without flow for more than a few weeks, or water would stagnate, creating water quality issues and potential infrastructure damage. This creates a perverse incentive: during an extreme drought, Uisce Éireann would be operationally compelled to continue abstracting water even as the river runs dry, to protect the integrity of the €10.4 billion asset. The planning documents nor the Report address how this conflict of interest would be managed.

The Application's Treatment of Climate Risk is Inadequate

The original planning assumptions, made over 20 years ago, presumed the Shannon would have ample water. While the application includes detailed analysis of climate impacts together with extensive modelling, I am not convinced it has been properly modelled and the Report does not properly show that there is ample water. We know that climate change increases the frequency and severity of droughts. We know that low flows have occurred historically. Has the project modelled the 1-in-100-year or 1-in-500-year drought scenario under future climate projections? Uisce Éireann does not appear to have addressed my comment on whether they considered the full utilization of existing and possible future water abstraction licences upstream and the intersection of cumulative abstraction with the effect of climate change and their impact on inflow?

Concerns raised by the Shannon River Protection Alliance and several local councils illustrate the public's deep unease. They have highlighted the risk of the Shannon potentially running dry and possible lowering of water levels in Lough Derg. Even in a normal year, the abstraction to Dublin will represent over 20% of the flow in the river during summer months, and up to 40% of the flow that the ESB currently provides to the Lower River Shannon. Uisce Éireann has stated it will work with the ESB to abstract water that would otherwise have been diverted to Ardnacrusha. However, **no formal operating agreement with the ESB is presented in the application on which the comprehensive modelling of flows based on agreed hydrological data is provided.** This is another critical gap requiring trust in the presence of a failure to disclose known risks.

Ecological Impacts of the Pipeline Project

The Report has raised several issues regarding the appropriateness of the legal framework for the planning application in terms of ecological impacts. It appears that the Pipeline Project will have to not just meet ecological and water quality objectives but to improve them as the Shannon River is a heavily modified river system.

I respectfully urge the Commission to request further information from Uisce Éireann demonstrating how the proposed abstraction can be reconciled with the ecological and water quality objectives.

Is a Pipeline Project the Best Solution for Ireland?

As stated in my original response, I have significant doubts that this pipeline represents the optimal solution for Ireland. The opportunity cost of committing €10.4 billion to this single pipeline project is immense, and my review suggests that other options that have been underweighted or prematurely dismissed were not addressed in the Report.

These options include:

- A. Underutilisation of Existing GDA Water Resources:
- B. Leakage Reduction in the GDA
- C. Demand Management
- D. Wastewater Reuse
- E. Conjunctive Use and Groundwater:
- F. Economic Growth and Regional Balance

The opportunity cost is immense. €10.4 billion spent on the pipeline is €10.4 billion not spent on upgrading infrastructure in regional growth centres, accelerating leakage reduction nationwide, and investing in sustainable water management models. For example, based on the cost of recent renewable energy infrastructure projects in Ireland, an investment of €10.4 billion could potentially replace approximately 30% to 40% of Ireland's total electricity generation, primarily by installing new onshore wind and solar capacity.

New Observation - Consideration for the Removal of Ardnacrusha HEPS and restoration of the Shannon River to Better address Future Needs

Additionally, as I more deeply review Report and the Pipeline Project documents, it is clear that the opportunity to remove Ardnacrusha HEPS in the future will be eliminated as it would be needed to regulate flows in Parteen where the intake structure for the Pipeline Project is proposed. There are significant ecological and environmental benefits to be derived from removing or completely decommissioning Ardnacrusha Power Station. While it originally was constructed as a beacon project for the new free state of Éire, its dwindling share of the modern grid means its original economic value is now heavily weighed against its steep environmental toll. This issue appears to make more sense in terms of what could be possible for the Shannon River and opens up a host of other opportunities in terms of reoperation of the river and significantly improving ecological and environmental issues as well as creating massive recreation and development opportunities in the Clare, Tipperary, and Limerick region. The Proposed Pipeline relies completely on the water levels being strictly regulated via the Parteen Basin infrastructure upstream from the plant and locks in the existence of Ardnacrusha into the

long future without appropriate evaluation. It no longer seems appropriate that the NPF treats Ardnacrusha and the wider Shannon Hydroelectric Scheme as permanent, legally protected critical infrastructure that supports Ireland's long-term energy and water resource planning. There are other more appropriately future oriented projects.

I urge the Commission to consider whether the application adequately addresses its consistency with the NPF, whether the NPF needs to consider the removal of Ardnacrusha HEPS as critical infrastructure, and whether a full assessment has been made of the water supply project's likely effect on regional development patterns.

General Pipeline Engineering Concerns

The Report did not address appropriately address many of my specific pipeline engineering observations/

Regarding Systemic Vulnerability - My observation is specifically addressed in Point 352. I stated that a single-source water supply line presents a significant strategic vulnerability, and continues that the application should address vulnerability assessment, probabilistic analysis, emergency response protocols, estimated repair times, and redundancy provisions. This point was not comprehensively addressed especially in terms of pipeline security and terrorist threats. Steel pipe is a wise choice and is more easily repairable than other options, however, pipelines fail and large ones can be difficult to get back in service.

Washout Valves and Ecological Risk

The 236 treated water washout valves present a recurring operational risk. Dechlorination prior to discharge must be guaranteed, and the application should identify each discharge location, assess receiving water sensitivity, and demonstrate controls to prevent ecological harm.

Invasive Species Operational Burden

Established zebra and quagga mussel populations represent a significant long-term maintenance liability. The proposed intake infrastructure will require frequent cleaning that is considered in the application. The potential need for chemical treatment raises further environmental and operational concerns.

Other Observations

Such other relevant observations may arise as more documentation and results of modelling and analysis become available. I respectfully reserve the right to supplement these observations when further information is made available by the Acquiring Authority and to tender these at the An Coimisiún Pleanála Hearing.

Closing

Again, I am deeply grateful to An Coimisiún Pleanála for the opportunity to make this submittal on the Report. I also thank Uisce Éireann, their staff, and all the consultants and specialists and their tremendous work to address this critical water supply issue for the people of Ireland. I would also like to acknowledge the people at all the government agencies, NGOs, businesses, and farms, and all those reviewing the project. Together we all serve Éire and all that she stands for, including An tSionainn, so that future generations may prosper in harmony with nature.

It is interesting to note that the 2026 Drought in Ireland that we are currently experiencing is resulting in additional questions related to the efficacy of climate change projections and what could happen in Ireland as the World approaches runaway scenarios related to Greenhouse Gas (GHG) emissions and the resultant sea level rise and dramatic changes in hydrology and ecology. The future that was projected 5 years ago or even 12 months ago has radically changed and the projections of government organizations and private industry related can no longer be relied on with certainty. Indeed, nowhere is this more obvious than in Europe where many old alliances and relationships tied to peace, national security, food distribution, humanitarian aid, and climate have been dissolved.

Therefore, I continue to object to the proposed pipeline project and request An Coimisiún Pleanála to reject this Strategic Infrastructure Development Application. I also urge An Coimisiún Pleanála to deeply consider the changing state of affairs in the World and across Europe and how such changes affect how we should be managing infrastructure, developing new infrastructure, adapting to climate change, and hydrogeological and ecological stresses.

My hope is that my input will continue to assist An Coimisiún Pleanála with their decision on this application and guide Uisce Éireann to develop the best alternative in terms of the challenges that all of Ireland is facing related to economic growth, water supply, and related issues affecting all of Ireland, not just the GDA.

Respectfully Submitted,

James Crowley

James Crowley

Professional Civil Engineer

California 48949

Carrigdangan,

Gyleen, Whitegate,

Co. Cork P25WY43

jimscvwd@gmail.com

+1 415-812-2460

Our Case Number: ACP-323980-25



**An
Coimisiún
Pleanála**

James Crowley
Carrigdangan
Gyleen
Whitegate
Co. Cork
P25 WY43

Date: 04 August 2026

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in the counties of Clare, Limerick, Tipperary, Offaly, Kildare, and Dublin.

Dear Sir / Madam,

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The Commission will revert to you in due course in respect of this matter.

Please be advised that a copy of all submissions/observations received in relation to the application will be made available for inspection on the Commission's website at the following link:
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If you have any queries in the meantime, please contact the undersigned officer of the Commission. Please quote the above mentioned An Coimisiún Pleanála reference number in any correspondence or telephone contact with the Commission.

Yours faithfully,

Eimear Reilly
Executive Officer
Direct Line: 01-8737184

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Eimear Reilly

From: LAPS
Sent: Wednesday 22 July 2026 10:26
To: Eimear Reilly
Subject: FW: AACP-323980-25
Attachments: Shannon Dublin Pipeline Response Letter 2026-7-21.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Categories: PA Only

From: SIDS <sids@pleanala.ie>
Sent: Wednesday 22 July 2026 09:02
To: LAPS <laps@pleanala.ie>
Subject: Fw: AACP-323980-25

Hi all,

Here's another one for the same case!

Thank you,
Alba

From: Jim Crowley <jimx1000@gmail.com>
Sent: Tuesday, July 21, 2026 5:02 PM
To: SIDS <sids@pleanala.ie>
Subject: AACP-323980-25

You don't often get email from jimx1000@gmail.com. [Learn why this is important](#)

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Attached is Additional Submission on Uisce Éireann's Response to Submission Report for Water Supply Project (Eastern and Midlands Region) Strategic Infrastructure Development Application - Submission #50, ABP Case number: ACP-323980-25

James Crowley

21st July, 2026

Strategic Infrastructure Development Section
An Coimisiún Pleanála
64 Marlborough Street
Dublin 1 D01 V902
Via Email: sids@pleanala.ie

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I continue to urge An Coimisiún Pleanála to find the application deficient and to use their leadership in planning to direct Uisce Éireann and others in the future to deeply consider the impact of SID projects on the intangible cultural heritage Ireland's rivers, mountains, bays, and other natural resources.

The Take (Abstraction) of the River Shannon's Water

The application is based upon a projected peak raw water take (I will refer to the abstraction term in the rest of my letter for clarity with the Report) of 300Mld (3.47 m³/s) at the year 2050 in the EIAR. Although this peak abstraction rate is envisaged to be approached during periods of major drought in the east there are no real limits as to how much Uisce Éireann will abstract other than pipeline capacity and what limitations would be imposed in the event of a major drought in the Shannon Basin.

The operation of Ardnacrusha Hydroelectric Power Station (HEPS) is the dominant controlling factor related to flows in the Shannon for the last 100 years. The application by Uisce Éireann does not specifically outline what measures are undertaken for the Ardnacrusha HEPS and how specifically they relate to the waterbodies currently affected by the abstraction and impoundment for the Ardnacrusha HEPS.

Uisce Éireann argues that during extreme drought conditions this would not be 30% or greater of the flow in the Shannon River and thus we see a classic 'apples versus oranges' conundrum regarding the language used to describe the highly modified river system. This highly modified river system is controlled primarily by the century old Ardnacrusha HEPS with the majority of the highly managed flows at diverted into the headrace canal to supply the Ardnacrusha hydro station and a statutory "absolute minimum compensation flow" of 10 m³/s goes down the Old Shannon channel that is required by law to prevent total ecological collapse of the riverbed.

Uisce Éireann argues that the abstraction does not significantly impact flow in the Old Shannon Channel because the flow would come from the normal operation of the Parteen Basin. Parteen Basin is considered a flowing water body (a pass through regulatory basin) where the exact amount of water present is constantly changing based on its flow rate. The Parteen Basin is generally considered to have no defined range of stored water because it does not actively store or retain water. They argue that their climate and hydrological modeling in the Environmental Impact Assessment Report (EIAR) shows that even during severe droughts (similar to 2018), water levels inside the basin will remain within their normal operating band. This band is an elevation difference of **1.30 metres** that the Electricity Supply Board (ESB) uses to manage water flow into

both the Ardnacrusha hydroelectric power station headrace canal and the lower River Shannon channel.

The total volume in this normal band in Parteen Basin is equivalent to two weeks of peak flow in the proposed pipeline Eastward from the Shannon. Uisce Éireann states that the ESB manages the flows in Parteen and that their abstraction would not change ESB's operating regime with water used for hydroelectricity instead being diverted Eastward into the pipeline. The ESB works to keep the surface levels of Lough Derg within a standard window to balance electricity production, navigation, and environmental safety. ESB would now also have to balance flows to Uisce Éireann. ESB has no direct influence on flows from Lough Derg to Parteen Basin other than the controls in the lower basin. The water flow from Lough Derg to Parteen Basin is restricted by the flow capacity of the outlet channel at Killaloe but cannot directly manage this flow. Bottomline here appears to be that Uisce Éireann is relying on operational storage within the operating band ESB manages for both Parteen and Lough Derg even though ESB explicitly states that it does not store any water. However, in an extreme drought with Lough Derg elevations lowered, despite the assertions of Uisce Éireann, I believe the impact of their abstraction will be significant.

There is a fundamental and inadequately assessed risk at the heart of this pipeline project: the assumption that the Shannon has a permanent surplus of water that can be safely abstracted, even during extreme future drought conditions. Uisce Éireann's assumption is flawed and climate change significantly exacerbates extreme drought and hydrological conditions. Uisce Éireann's modelling assumes no significant impact due to two historic drought scenarios (1995 and 2018) based upon modelling. The Report does not provide a sufficient robust response to reassure the public or the Commission that the risk has been properly addressed despite extensive modelling. Their reliance on the 2% as a de minimis significance level is highly misleading.

LOSS OF ECOLOGICAL RESILIENCE

The take (abstraction) of up to 300 million litres per day is stated to represent only 2% of the long-term average flow at Parteen. This statistic is misleading because it masks the critical question: *what percentage of the flow will be taken during the lowest recorded flows, or during future droughts intensified by climate change?* The lack of clarity around the issue of take (abstraction) reflects poorly on Uisce Éireann as does the representation that 2% of the long-term average flow is not significant. Uisce Éireann refers to ESB flows and their management to always manage the minimum flow at 10 cubic meters per second. at Parteen.

It appears that Uisce Éireann will need to apply to the Environmental Protection Agency (EPA) for a large-scale abstraction licence, and that process will define constraints during low flows. However, the Report does not provide clarity on this process, how the ESB will be involved, and what potential constraints should be considered. This is a material omission. Low flows and dropping of levels in Lough Derg have significant impacts. Already, significant algae blooms are

common in Lough Derg during low flow conditions. Until the licensing process and long term operational contracts with ESB are complete and enforceable limits are set, we have to conclude that there is a risk that the abstraction could represent a very high percentage—or even all—of the flow in the Shannon downstream of the Parteen basin during extreme future drought.

I did not get an appropriate response to the fact that the pipeline project's own operational requirements compound this risk. The proposed pipeline cannot be left without flow for more than a few weeks, or water would stagnate, creating water quality issues and potential infrastructure damage. This creates a perverse incentive: during an extreme drought, Uisce Éireann would be operationally compelled to continue abstracting water even as the river runs dry, to protect the integrity of the €10.4 billion asset. The planning documents nor the Report address how this conflict of interest would be managed.

The Application's Treatment of Climate Risk is Inadequate

The original planning assumptions, made over 20 years ago, presumed the Shannon would have ample water. While the application includes detailed analysis of climate impacts together with extensive modelling, I am not convinced it has been properly modelled and the Report does not properly show that there is ample water. We know that climate change increases the frequency and severity of droughts. We know that low flows have occurred historically. Has the project modelled the 1-in-100-year or 1-in-500-year drought scenario under future climate projections? Uisce Éireann does not appear to have addressed my comment on whether they considered the full utilization of existing and possible future water abstraction licences upstream and the intersection of cumulative abstraction with the effect of climate change and their impact on inflow?

Concerns raised by the Shannon River Protection Alliance and several local councils illustrate the public's deep unease. They have highlighted the risk of the Shannon potentially running dry and possible lowering of water levels in Lough Derg. Even in a normal year, the abstraction to Dublin will represent over 20% of the flow in the river during summer months, and up to 40% of the flow that the ESB currently provides to the Lower River Shannon. Uisce Éireann has stated it will work with the ESB to abstract water that would otherwise have been diverted to Ardnacrusha. However, **no formal operating agreement with the ESB is presented in the application on which the comprehensive modelling of flows based on agreed hydrological data is provided.** This is another critical gap requiring trust in the presence of a failure to disclose known risks.

Ecological Impacts of the Pipeline Project

The Report has raised several issues regarding the appropriateness of the legal framework for the planning application in terms of ecological impacts. It appears that the Pipeline Project will have to not just meet ecological and water quality objectives but to improve them as the Shannon River is a heavily modified river system.

I respectfully urge the Commission to request further information from Uisce Éireann demonstrating how the proposed abstraction can be reconciled with the ecological and water quality objectives.

Is a Pipeline Project the Best Solution for Ireland?

As stated in my original response, I have significant doubts that this pipeline represents the optimal solution for Ireland. The opportunity cost of committing €10.4 billion to this single pipeline project is immense, and my review suggests that other options that have been underweighted or prematurely dismissed were not addressed in the Report.

These options include:

- A. Underutilisation of Existing GDA Water Resources:
- B. Leakage Reduction in the GDA
- C. Demand Management
- D. Wastewater Reuse
- E. Conjunctive Use and Groundwater:
- F. Economic Growth and Regional Balance

The opportunity cost is immense. €10.4 billion spent on the pipeline is €10.4 billion not spent on upgrading infrastructure in regional growth centres, accelerating leakage reduction nationwide, and investing in sustainable water management models. For example, based on the cost of recent renewable energy infrastructure projects in Ireland, an investment of €10.4 billion could potentially replace approximately 30% to 40% of Ireland's total electricity generation, primarily by installing new onshore wind and solar capacity.

New Observation - Consideration for the Removal of Ardnacrusha HEPS and restoration of the Shannon River to Better address Future Needs

Additionally, as I more deeply review Report and the Pipeline Project documents, it is clear that the opportunity to remove Ardnacrusha HEPS in the future will be eliminated as it would be needed to regulate flows in Parteen where the intake structure for the Pipeline Project is proposed. There are significant ecological and environmental benefits to be derived from removing or completely decommissioning Ardnacrusha Power Station. While it originally was constructed as a beacon project for the new free state of Éire, its dwindling share of the modern grid means its original economic value is now heavily weighed against its steep environmental toll. This issue appears to make more sense in terms of what could be possible for the Shannon River and opens up a host of other opportunities in terms of reoperation of the river and significantly improving ecological and environmental issues as well as creating massive recreation and development opportunities in the Clare, Tipperary, and Limerick region. The Proposed Pipeline relies completely on the water levels being strictly regulated via the Parteen Basin infrastructure upstream from the plant and locks in the existence of Ardnacrusha into the

long future without appropriate evaluation. It no longer seems appropriate that the NPF treats Ardnacrusha and the wider Shannon Hydroelectric Scheme as permanent, legally protected critical infrastructure that supports Ireland's long-term energy and water resource planning. There are other more appropriately future oriented projects.

I urge the Commission to consider whether the application adequately addresses its consistency with the NPF, whether the NPF needs to consider the removal of Ardnacrusha HEPS as critical infrastructure, and whether a full assessment has been made of the water supply project's likely effect on regional development patterns.

General Pipeline Engineering Concerns

The Report did not address appropriately address many of my specific pipeline engineering observations/

Regarding Systemic Vulnerability - My observation is specifically addressed in Point 352. I stated that a single-source water supply line presents a significant strategic vulnerability, and continues that the application should address vulnerability assessment, probabilistic analysis, emergency response protocols, estimated repair times, and redundancy provisions. This point was not comprehensively addressed especially in terms of pipeline security and terrorist threats. Steel pipe is a wise choice and is more easily repairable than other options, however, pipelines fail and large ones can be difficult to get back in service.

Washout Valves and Ecological Risk

The 236 treated water washout valves present a recurring operational risk. Dechlorination prior to discharge must be guaranteed, and the application should identify each discharge location, assess receiving water sensitivity, and demonstrate controls to prevent ecological harm.

Invasive Species Operational Burden

Established zebra and quagga mussel populations represent a significant long-term maintenance liability. The proposed intake infrastructure will require frequent cleaning that is considered in the application. The potential need for chemical treatment raises further environmental and operational concerns.

Other Observations

Such other relevant observations may arise as more documentation and results of modelling and analysis become available. I respectfully reserve the right to supplement these observations when further information is made available by the Acquiring Authority and to tender these at the An Coimisiún Pleanála Hearing.

Closing

Again, I am deeply grateful to An Coimisiún Pleanála for the opportunity to make this submittal on the Report. I also thank Uisce Éireann, their staff, and all the consultants and specialists and their tremendous work to address this critical water supply issue for the people of Ireland. I would also like to acknowledge the people at all the government agencies, NGOs, businesses, and farms, and all those reviewing the project. Together we all serve Éire and all that she stands for, including An tSionainn, so that future generations may prosper in harmony with nature.

It is interesting to note that the 2026 Drought in Ireland that we are currently experiencing is resulting in additional questions related to the efficacy of climate change projections and what could happen in Ireland as the World approaches runaway scenarios related to Greenhouse Gas (GHG) emissions and the resultant sea level rise and dramatic changes in hydrology and ecology. The future that was projected 5 years ago or even 12 months ago has radically changed and the projections of government organizations and private industry related can no longer be relied on with certainty. Indeed, nowhere is this more obvious than in Europe where many old alliances and relationships tied to peace, national security, food distribution, humanitarian aid, and climate have been dissolved.

Therefore, I continue to object to the proposed pipeline project and request An Coimisiún Pleanála to reject this Strategic Infrastructure Development Application. I also urge An Coimisiún Pleanála to deeply consider the changing state of affairs in the World and across Europe and how such changes affect how we should be managing infrastructure, developing new infrastructure, adapting to climate change, and hydrogeological and ecological stresses.

My hope is that my input will continue to assist An Coimisiún Pleanála with their decision on this application and guide Uisce Éireann to develop the best alternative in terms of the challenges that all of Ireland is facing related to economic growth, water supply, and related issues affecting all of Ireland, not just the GDA.

Respectfully Submitted,

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