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Local perspectives of national energy projects: reconstructing the impact of post war nuclear power stations in north Wales from archival sources

Abstract

While national energy infrastructure projects possess significant reach and scale in supply terms, they are focused on a smaller number of power generation sites and have a significant impact on those specific localities. Britain's post war nuclear power programme was no different. Emblematic of government confidence and optimism in technological progress, nuclear sites also shaped community identities, languages, and attitudes to modernity, and affected the lives, routines, and prospects of residents. This article outlines available historical sources linked to nuclear power station construction and its wider effect on north Wales, demonstrating the economic, social, cultural, and political impact of the industry on a variety of local groupings and communities.

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Plan of the article

- → Introduction
- → Reconstructing narratives through local newspapers
- → How national projects affected localities planning and permission documents
- → Political tensions and nuclear power archives of interest groups
- → Conclusion

INTRODUCTION

This article draws on a scoping project conducted by historians and archaeologists at Bangor University for a 2018 research that evaluated potential or future historical and interdisciplinary research into communities created or affected by the construction of two power stations in north Wales.1 Through greater understanding of the impact of major energy infrastructure projects, such as nuclear power, we can better appreciate how their construction affected local communities in post-war Britain. Recent coverage of the British nuclear industry has been predominantly national in focus, which was logical for a state-level project implemented by the UK Government.² Only research led by Christine Wall has covered a specific power station (Sizewell A) and its construction in significant depth.3 For north Wales, the location of two early British nuclear power stations, limited published work exists to help explain the industry's impact in this predominantly rural region. Although oral history has helped to fill in some gaps, such as the comprehensive Sellafield story's project run by Cumbria Archives, the passing of time ensures that fewer key actors are available for interview, meaning potential for such effective studies is rapidly disappearing.4 The Women's Archive of Wales' project "Voices from the Factory Floor" has collected the experiences

1 "Nuclear Communities" was a feasibility study funded by the Boiling Water Reactor (BWR) research network at Bangor University between January and April 2018.

- 2 Jonathon Hogg and Kate Brown, "Introduction: social and cultural histories of British nuclear mobilisation since 1945", *Contemporary British History*, vol. 33, n° 2, 2019, 161–169; Simon Taylor, *The Fall and Rise of Nuclear Power in Britain* (Cambridge: UIT, 2016); For wider literature: Tom Kelsey, "Review of The Fall and Rise of Nuclear Power in Britain. By Simon Taylor", *Twentieth Century British History*, vol. 28, n° 1, 2017, 152–154.
- 3 Christine Wall, "'Nuclear prospects': the siting and construction of Sizewell A power station 1957-1966", Contemporary British History, vol. 33, n° 2, 2019, 246-273; Christine Wall, Linda Clarke, Charles McGuire, and Olivia Munoz-Rojas, Building Sizewell A nuclear power station: it was a new world (London: University of Westminster, 2014).
- **4** Hunter Davies (ed.), *Sellafield Stories: Life in Britain* 's *First Nuclear Plant* (London: Constable, 2012).

of women working in the manufacturing industries in Wales from 1945 to 1975, but without references to nuclear plants – while a similar project dedicated to nuclear energy in Wales might prove transformative, there is no sign of such a project as of yet.⁵

This article considers how nuclear power generation more broadly, and the construction of Trawsfynydd and Wylfa (and the non-construction of Edern and Connah's Quay) stations in particular, have had limited impact on the historiography of post-war Wales, despite the presence of significant archival material. In major modern Welsh history texts, north Wales' power stations receive only fleeting mentions.7 Not all of these are even accurate. For instance, Kenneth O. Morgan suggested that Wylfa was constructed before Trawsfynydd, when the opposite was the case.8 While recent scholarship has moved beyond a traditional focus on extractive industries prior to the Second World War, there has been little exploration of public utilities beyond the coal and steel industries.9 More fundamentally, we lack a clear timeline of when governments planned and built these two stations. Construction at Trawfynydd began in 1959, with the station commissioned in 1965.

- 5 Women's Archive of Wales, "Voices from the Factory Floor", 2014, URL: http://www.factorywomensvoices.wales/en/index.php? (accessed 23/02/2021). Many thanks to the anonymous reviewer for this observation.
- **6** Marc Collinson, "Nuclear power and historical Change: Wylfa", *Transactions of the Anglesey Antiquarian* Society and Field Club, 2018, 97-104.
- 7 John Davies, A History of Wales (Harmondsworth: Penguin, 2007), 607; Geraint H. Jenkins, A Concise History of Wales (Cambridge: Cambridge University Press, 2007), 259-260; Philip Jenkins, A History of Modern Wales, 1536-1990 (Harlow: Routledge, 1992), 20, 374, 387; Gareth Elwyn Jones, Modern Wales: A concise history (Cambridge: Cambridge University Press, 1994), 191; Martin Johnes, Wales since 1939 (Manchester: Manchester University Press, 2012), 155-156, 214, 261, 306, 403; Kenneth O. Morgan, Rebirth of a Nation: A history of modern Wales (Oxford: Oxford University Press, 1982), 319, 327-328, 338; David Ross, Wales: History of a Nation (New Lanark: Waverley Books, 2005), 246.
- 8 Morgan, Rebirth of a Nation, 327-328 (cf. note 6).
- **9** Louise Miskell (Ed.), *New Perspectives on Welsh Industrial History* (Cardiff: University of Wales Press, 2020).

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Work at Wylfa started in 1963, with the plant commissioned in 1971. Furthermore, even fewer scholars discuss the localised impact of nuclear power on north Wales, or consider what happened after Trawsfynydd and Wylfa were built. 10 A notable recent intervention by Sean Martin and Mari Wiliam analysed the influence of the Chernobyl accident in the Soviet Union on north Wales perceptions of nuclear power in the 1980s. 11 Publication of such pathbreaking work is encouraging, but further and deeper research is clearly necessary to truly comprehend the enormous impact of nuclear power generation on this part of Wales.

- Primarily what exist are political history studies of the area which focus on nuclear power as one of several projects designed to reinvigorate a local economy impacted by the decline of traditional industries such as slate and agriculture. This ambition was predominantly seen as a failure. Most published and unpublished research on north Wales nuclear power station construction has placed it in either a national political framework or a localised high political context in which atomic power generation is a periodic concern. Regional politicians focused
 - 10 Kenneth Roberts, "The Development of Industry in Anglesey from the late Eighteenth Century", *Transactions of the Anglesey Antiquarian Society and Field Club*, 1969-1970, 219-220; Geraint Jones and Gwenllian Jones Rowlinson, *Anglesey Towns and Villages* (Stroud: Amberley Publishing, 2015); Steve Plant, *A Wander Around the Coast of Wales* (Peterborough: Fast Print Publishing, 2014), 65-66.
 - 11 Sean Aeron Martin and Mari Elin Wiliam, "Politicising Chernobyl: Wales and Nuclear Power during the 1980s", *Transactions of the Royal Historical Society*, vol. 29, 2019, 273-292.
 - 12 Andrew Edwards, Labour's Crisis: Plaid Cymru, the Conservatives and the challenge to Labour dominance in north Wales, 1960-79 (Cardiff: University of Wales Press, 2011).
 - **13** D. Ben Rees, Cofiant Cledwyn Hughes (Talybont: Y Lolfa, 2017).
 - 14 David S. Moon, "Devolution", in Andrew S. Crines and Kevin Hickson (Eds.), Harold Wilson, the unprincipled Prime Minister? Reappraising Harold Wilson (London: Biteback, 2016), 228-230; Andrew Edwards, "Answering the challenge of Welsh nationalism: Goronwy Roberts and the appeal of the Labour party in north-west Wales during the 1950s", Welsh History Review, vol. 22, n° 1, 2004, 139-143; Keith Gildart, "Jones, Thomas William

on securing nuclear power stations to alleviate pressures created by economic, social, and cultural change, and to maintain their elected position. Such research places these changes in a narrow, representative political context.¹⁵

What is missing is the broader picture of how and why the power stations were constructed in their locations, their design and commissioning, and their perceived impact on the local environment. To do this, the article outlines a number of potential research areas that maybe pursued, based on initial, scoping research. First, it shares the findings of a review of relevant regional newspapers to reconstruct key events and issues contemporary to the construction of north Wales' nuclear power stations. Second, it examines different aspects of how these national infrastructure projects affected localities, the ambitions that underpinned them, and the sources available to facilitate the study of this. Finally, it explores the political debates around the development of nuclear power, including the initial importance of landscape and environment rather than health. Throughout, it evaluates the archival source base, outlining what is available to scholars re-evaluating this understudied aspect of post-war history in north-west Wales.

RECONSTRUCTING NARRATIVES THROUGH LOCAL NEWSPAPERS

Existing historical interpretation is limited in scope, with the study of nuclear power's impact on Wales in its infancy. Furthermore, the lack of any accurate and detailed narrative hindered understanding of the development of north Wales' nuclear industry and its wider impact. Therefore, this article is partially based on a survey of newspaper coverage which examined historical newspapers to understand how the development of nuclear power was represented in varied Welsh media outlets. This provided a chronology of

(Lord Maelor)", in Keith Gildart and David Howell (Eds.), *Dictionary of Labour Biography, Volume 13* (Houndmills: Routledge, 2010), 188-198.

15 Arglwydd Maelor (T.W Jones), Fel Hyn Y Bu (Denbigh: Gwasg Gee, 1970), 149–151; Edwards, "Answering the challenge", 139, 143 (cf. note 12).

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events and commentary, and elaborated on the names of relevant groupings, individuals, and occurrences to inform further research. Post-war news media remains a useful historical source, as local newspapers acted as filters between local communities and the events that affected them: how nuclear power was discussed, and by whom, from the initial debates considering the siting of stations in 1955, to the confirmation of the final station at Wylfa in 1963. To achieve this, full runs of two relevant local newspapers and a collection of press cuttings from Bangor University archives can be conducted. This wide sample reflected different political traditions and a cross-section of communities affected by power station construction across north Wales.

First, the Welsh Nation, the English medium monthly newspaper of the nationalist party, Plaid Cymru, which provided interesting coverage of the centrality to its thinking of leader Gwynfor Evans' electoral prospects within the Merioneth constituency. This area was the site of significant events in Welsh nationalist interpretations of the country's recent past, like the controversial construction of the Tryweryn reservoir, and provides an alternative perspective on the construction of the power station at Trawsfynydd. Taken together with the established, Bangor-based, Conservative-leaning North Wales Chronicle, whose coverage focused across historic Caernarfonshire, Conway, and Anglesey, a more comprehensive picture emerges.16 These full runs of newspapers were complemented by the Dafydd Glyn Jones press cutting archive, compiled by a Bangor University academic over a sixty-year period. This collection gives a broader picture of Welsh life as recorded in newspapers throughout the second half of the twentieth century.17 This collection

has provided a variety of insights into the wider press discussion of the sighting of north Wales as three proposed nuclear power stations alongside commentary on the activities of the London-based, Conservative governments of the late 1950s and early 1960s.

This survey of local press reports corrected several assumptions linked to the construction of the stations and their significant impact upon communities in north Wales. For example, to better appreciate the impact of the Trawsfynydd station, local government papers can help us understand how the operation of the first station impacted the local landscape and resident communities. Meanwhile, with the Edern station, there is an opportunity to consider why nuclear power stations were not constructed as opposed to simply why they were. 18 Further examination of the purpose of local authorities in historic Merionethshire, Caernarfonshire, and Anglesey highlight how smaller infrastructural changes, such as moving roads, were often linked to the development of larger, state-funded projects. 19 Much significant work took place from the 1950s and these power stations were major public utilities that required new infrastructure to supply their markets. Similarly, the significant presence of the Central Electrical Generating Board (CEGB) in the area likely increased their activity in ensuring rural communities received power.

Local council and government papers trace the reasoning for political decisions and emphasise the importance of the power stations as catalysts of socio-economic change.²⁰ The newspaper survey emphasised the importance of the early 1960s as a turning point in the redevelopment of north Wales. Government funding was utilised to rebuild roads, towns, and even the Britannia bridge to make the new power station

¹⁶ Before local government reforms in 1974, these were the used names for counties now known as Gywnedd (combining Caernarfonshire and Meirionethshire), Conwy, and Ynŷs Môn.

¹⁷ Toriadau papur newydd "Ynni niwclear - Yr Wylfa", Dafydd Glyn Jones Press Cutting archive (DJGPCA), DJG/22/26, Bangor University Archives (BUA), Bangor; "Toriadau papur newydd "Trawsfynydd ac Edern", DJGPCA, DJG/22/27, BUA, Bangor.

¹⁸ North Wales Chronicle, 14 October 1958; "Caernarvon and Denbigh Herald", 12 September 1969, DJGPCA, DJG/22/27, BUA, Bangor.

¹⁹ North Wales Chronicle, 15 December 1961; North Wales Chronicle, 27 September 1963.

²⁰ North Wales Chronicle, 14 September 1962.

sites more accessible for contractors.21 Similarly, the constructors of both power stations were focused on how the projects fitted into the landscape. Appointing influential architects such as Basil Spence and landscapers such as Sylvia Crowe demonstrated the appreciation of blending these power stations into the countryside.22 How industry impacted the scenic rural nature of north Wales, especially as the electricity produced had to be transported large distances to customers, led to the construction of pylons becoming a major concern.23 By examining official government documents linked to the project, and exploring maps and plans submitted to local authorities, it is possible to understand the approach taken by these landscape engineers to alter the nature of the environments in which the stations were situated.24 Yet this willingness to modernise and transform rural areas at a time when ideas of preserving landscapes had been enacted as government policy in the shape of "National Parks" and "Areas of Outstanding Natural Beauty" inflamed much local and national resistance to power station construction.

During the 1950s and 1960s landscape was central to early anti-nuclear protests. For example, the influential Campaign for the Protection of Rural Wales' (CPRW) major concern was how the stations fitted into their wider landscape. Local CPRW branches often had contrary views to its central, executive council, which reflected local national splits that were also existent in local political parties. Plaid Cymru had similar problems with its national concerns and

the local need for employment, particularly in Merionethshire, where the party was attempting to secure parliamentary representation.²⁵ In many ways, the Labour and Conservative parties were more consistent. Labour favoured a "jobs first" approach to its politics in north Wales, while local Conservatives attached themselves to the investment overseen by the new Minister of Welsh Affairs, a post they had created in 1951.26 Fundamentally any study needs to understand the place of local people in the construction of these power stations.27 Local need for jobs must be understood in the context of rural depopulation and unemployment caused by the collapse of historic industries.²⁸ Such concerns then informed the lobbying and campaigning of local politicians.

Afterall, the jobs did not only create employ- 10 ment in the power station, but also through their construction and businesses created in association with them. In Anglesey, the development of the "Anglesey Aluminium", an enormous aluminium-smelting concern near Holyhead operated by Kaiser Aluminium and Rio Tinto Zinc, but heavily subsidised by the UK government, relied on the presence of the Wylfa power station to provide reduced price electricity for its smelting operations.²⁹ Used as base load for the Wylfa station, "Anglesey Aluminium", was a major user of the station's power, and it was Britain's largest user of electricity.30 Such projects represented significant government intervention in north Wales, and clearly showed the extent to which unemployment and depopulation linked to deindustrialisation underpinned significant political problems that government, local authorities, and politicians sought to address. Further work is needed to understand the impact of this

²¹ North Wales Chronicle, 2 October 1964; North Wales Chronicle, 27 November 1964; North Wales Chronicle, 14 May 1965.

²² Anon., "Trawsfynydd nuclear power station, Lake Trawsfynydd, Merionethshire; Architects: Sir Basil Spence, Bonnington & Collins, Sylvia Crowe & Associates (Landscape architects)", Official Architecture & Planning, 1969, 542-548.

²³ North Wales Chronicle, 17 January 1964. Further discussion of this issue may be found in: Katrina Navickas, "Conflicts of power, landscape and amenity in debates over the British Super Grid in the 1950s", Rural History. vol. 30, n° 1, 2019, 87-103.

²⁴ North Wales Chronicle, 16 August 1957.

²⁵ Welsh Nation, September 1957; North Wales Chronicle, 26 September 1958.

²⁶ North Wales Chronicle, 1 December 1961; North Wales Chronicle, 24 April 1964; North Wales Chronicle, 12 June 1964.

²⁷ Welsh Nation, November 1964.

²⁸ North Wales Chronicle, 29 August 1958; North Wales Chronicle, 12 September 1958; North Wales Chronicle, 3 October 1958.

²⁹ Edwards, *Labour's Crisis*, 243, 262 (cf. note 12).

³⁰ The Times, 7 February 2009.

national infrastructure project on various local communities, including communities of workers employed and those who protested against nuclear power. After all, these varied groups often possessed contradictory ideas and interests, but all resided within the hinterland of north Wales' atomic power stations and were affected by them.

HOW NATIONAL PROJECTS AFFECTED LOCALITIES - PLANNING AND PERMISSION DOCUMENTS

The rationale behind the sighting of new nuclear power stations and concerns about the natural landscape can be discerned from a plethora of government documents available. Government papers linked with the Treasury Solicitors and the National Parks Commission demonstrated that building at Trawsfynydd was not a straightforward decision due to its location within the recently designated Snowdonia National Park.31 Concerns about the preservation of the natural landscape was the basis of protest long before the health effects of nuclear power became apparent. Archival material created by the designers themselves allows for greater appreciation of what was intended. The papers of Dame Sylvia Crowe, the landscape architect hired by the government to landscape the area surrounding Trawsfynydd power station, show significant attempts were made to situate the stations within the countryside. 32 Collections like this aid understanding of how the areas surrounding power stations were landscaped to better inhabit their dramatic settings. Planning

31 Public Inquiry in Snowdonia National Park: application by the Central Electricity Board for the siting of a nuclear power station near Lake Trawsfynydd in Merioneth Snowdonia National Park', 1957-1958, Treasury Solicitor collection, TS 58/388, TNA, London; "Consultation with the Central Electricity Authority on the general siting, etc., of atomic power stations including Trawsfynydd in Snowdonia", 1956-1959, National parks Commission, COU 1/103, TNA, London; "Trawsfynydd Nuclear PowerStation: reports and correspondence", National parks Commission 1958-1968, COU 1/935, TNA, London.

32 Sylvia Crowe Collection, AR CRO, University of Reading Museums and Special Collections, Reading.

was central to this government intervention in north Wales and all levels of government were involved.

Significantly, power stations could only be built 12 with the consent of the local authorities within whose boundaries they existed. Due to this the purpose of local community councils will be important in any study relating to their construction. In particular, the views of Lleyn Rural District Council were decisive in the decision not to construct a station at Edern on the Llŷn Peninsula.33 The enthusiasm of Merionethshire County Council is a notable counterpoint to this, and collections relating to this authority show how county policymakers addressed issues and concerns raised by local communities.34 Further evidence is available from local newspapers (both in English and Welsh), local authority archival collections, and papers belonging to the local branch of the CPRW.35 For the Wylfa station, material also exists in the archives of Anglesey County and Twrcelyn Rural District Council, and these also focus on pylons housing and roads policy together with the station itself.

Records of formal political activities are limited, 13 but a great deal of evidence exists in collections accumulated by local representatives. For example, north Wales MEP Beata Brookes retained various assessments of the closing (without replacement) of Trawsfynydd in the early 1990s

33 Before local government reforms instituted in 1974, the Llŷn Peninsula was governed through the Lleyn Rural District Council. Lleyn is the anglicised name for the area.

34 Available as: "Merioneth County Council Minutes", 1877-1965, Merioneth County Council collection, GB 0220 Z/CM, Gwynedd Archives (Merionydd Record Office), Dolgellau. [In particular, Minutes of Merioneth County Council, 1877-1965, comprising County Council minute books, 1889-1965, and statutory minute books, 1954-1959; minutes of committees, 1877-1963, highways, 1911-1959, housing and public health, 1911-1961, 1937-1963. Committees for exploration include: Hydro-Electric Committee; Public Health and Housing Committee; Clerk's draft minute book].

35 "Lleyn Rural District Council, records", 1895-1985, Lleyn Rural District Council Records, GB 0219 XB/13, Gwynedd Archives (Caernarfon Record Office), Caernarfon.

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and how this concerned several local stakeholders. Merionydd District Council, the Mid-Wales Development Board, Gwynedd County Council (which then included Anglesey), and the CEGB collectively commissioned a report from the Institute of Economic Research at the University College of North Wales (UCNW - now Bangor University). It provides interesting statistical evidence of how the Trawsfynydd plant's staffing reflected its local environment, based on a survey with a reasonable 44 per cent response rate, and considered how a proposed station closure would affect the wider community. For example, 70 per cent of staff were local, compared to only 24 per cent at Oldbury in Gloucestershire.36 Further to this, 48.5 per cent of staff spoke Welsh at home while another 22.6 per cent spoke both Welsh and English at home. Therefore language, a major regional concern during the construction period, and local staffing of infrastructure projects in north Wales more generally, was less affected than presumed as a significant proportion of staff were Welsh speakers.

Other statistics emphasised the economic investment that the power station both directly and indirectly facilitated. Around 82% of employees were homeowners, which would have a significant impact on an area where the housing market was traditionally slow, and much housing stock was composed of holiday and second homes. Projections suggested a station closure would force at least 300 workers to move and 240 houses be sold, adding pressure to the housing market. When we consider 86.6% of staff lived within a reasonable travel to work area such a decision would have a major impact not only on the housing market but on the wider area's income also. Not only did the power station spend directly in the local economy, but it also paid over 8,000,000 pounds in salaries over 7 million of which was within the local travel to work area.37 After concerns were raised following the

Chernobyl accident in 1986, the chief executive of Gwynedd County council noted that "closing the two north Wales nuclear power stations without a job replacement scheme would be a tragedy for the local economy".³⁸ Material from Magnox, the station's operating company, is made available through the International Atomic Energy Agency (IAEA).

A copy of the Trawsfynydd decommissioning 15 manager's report to an IAEA conference demonstrated that the UCNW report was broadly correct, and calculations of the closures actual impact emphasised its significant. It described how, of 487 employees before closure, only 87 or 17.9% (all aged 25-45) moved on to other stations, 270 or 55.4 % remained to defuel the power station, itself a time-limited activity, while the remaining 26.7% took voluntary redundancy.39 While the station maintained a staff at 60% of its operating level, clearly the stations closure did have some effect.40 However, once constructed, the impact of removing these power stations would require equally significant investments. Due to the elongated decommissioning process of a nuclear power station, this was slower than for more immediate and comparable factory or slate industry closures, which had been comparatively instantaneous. Despite this, such national energy projects are always locally interpreted in terms of jobs and livelihoods, which were undoubtedly affected. Vast amounts of archival material, together with opportunities for oral history, clearly exists with reference to the decommissioning process, which happened comparatively recently. However, any project must also consider the other communities that existed, which either favoured or opposed the arrival of nuclear power. They shaped local and national perceptions, and in one case, managed to halt the planned construction of another station in north Wales.

³⁶ "Pamela M. Lewis (Institute of Economic Research, UCNW, Bangor), The Economic Impact of the Closure, without replacement, of Trawsfynydd Power Station", May 1985, Beata Brookes papers, 107, National Library of Wales (NLW), Aberystwyth.

³⁷ Id.

³⁸ "Daily Post cutting", 17 June 1986, Beata Brookes papers, 72, NLW, Aberystwyth.

³⁹ H.M. Jones, "Social Effects of Decommissioning Trawsfynydd Power Station", 2001. URL: https://inis.iaea.org/collection/NCLCollectionStore/_Public/32/057/32057819.pdf (accessed 24/02/2021).
40 Id.

POLITICAL TENSIONS AND NUCLEAR POWER - ARCHIVES OF INTEREST GROUPS

Although archives of local authorities exist in some detail, those of constituency-level political parties do not. As the limited political party collections for north Wales at the National Library of Wales' "Welsh Political Archive" clearly demonstrated, in the post-war era local political organisations in this region were less well organised than in the industrial heartlands in other parts of Wales or at the Wales-wide level. As Andrew Edwards has argued, this was because their paper trails were less consistent in detail and preservation.41 Prior to the 1970s, political structures in north Wales were very informal, with clear party affiliation unclear at best. Notably, one Labour MP's agent was the independent councillor, as a formal party-political structure was non-existent.42 Formal and informal political activity must, therefore, be reconstructed from newspapers, local parliamentarian's private papers, and campaign group collections. Local media, Wales-level political party papers and municipal archives therefore form the backbone of policy-oriented documentation. In this part of Britain, party labels mattered only as much as those who held them. 43 However most local MP's and authorities supported the development of the power stations to combat rural unemployment and depopulation and they championed the need for the employment of local staff.44

With the limited nature of party records in north Wales, those seeking to understand how political activities and debates shaped power station construction, together with community reaction to this process, are reliant on local newspapers and the archives of interest groups such as the CPRW. When local opposition appeared, earlier government policy often underpinned the

legitimacy of protester's demands.45 For example, when the CPRW campaign to stop the construction of a nuclear power station at Edern, they pointed to the fact that the Llŷn peninsula, on which it would be located, had been designated as an "area of outstanding natural beauty" by the same government only a year before.46 Such unintended consequences fitted into a narrative seen often in post war policy making, that the interaction between national and local government, resident communities, and pressure groups, often shaped policy making much more then ministers or planners might wish to admit. The actions of the CPRW had ensured that the sighting of any second station was to be on Anglesey, where the board hoped for less opposition.47 However, the Edern proposal did not go away. Through the lobbing of Goronwy Roberts and Will Edwards, the location of the power station here was still being explored in 1969.48 Lobbying occurred once again and this time the CPRW supported the CEGB's proposed site at Connah's Quay to avoid impacting rural Wales.49

Clearly, groups like the CPRW based their oppo- 18 sition on a deep commitment to conserving the rural beauty of Wales and were only willing to countenance projects that would "improve" the natural landscape. Its committee was primarily composed of local landowners, such as Clough Williams-Ellis (creator of the Portmeirion resort), his sister in law, Cecily Williams-Ellis (who chaired the Caernarfonshire group), and an assortment of military officers and local

⁴¹ Edwards, Labour's Crisis (cf. note 12).

⁴² Ibid., 205; "Diary", 1910-1971, Papers of William Thomas Bason, BMSS/39765-39, BUA, Bangor.

⁴³ Guardian, 5 September 2007.

^{44 &}quot;Pamela M. Lewis (Institute of Economic Research, UCNW, Bangor), The Economic Impact of the Closure, without replacement, of Trawsfynydd PowerStation", May 1985, Beata Brookes papers, 107, NLW, Aberystwyth.

^{45 &}quot;Letter to Cecily Williams-Ellis from Peter Thomas MP", 24 March 1959, Cecily Williams-Ellis (CWE) papers, B16, NLW, Aberystwyth.

^{46 &}quot;Manchester Evening News cutting", 19 August 1969, CWE papers, B16, NLW, Aberystwyth.

^{47 &}quot;Letter to Cecily Williams-Ellis from Peter Thomas MP", 24 March 1959, CWE papers, B16, NLW, Aberystwyth.

^{48 &}quot;Newspaper clipping", 15 August 1966, CWE papers, B16, NLW, Aberystwyth.

^{49 &}quot;Letter to Cecily Williams-Ellis from CF Weedon (CEGB)", 21 August 1970, CWE papers, B16, NLW, Aberystwyth; "Letter to CEGB from CWE and Caernarvonshire branch", n.d., CWE papers, B16, NLW, Aberystwyth.

notaries.50 Discussions were focused around how the local environment was impacted by the creation of the power stations. The groups effective lobbying, which undermined the construction of a station at Edern, angered local representatives who felt the CPRW reflected their own private concerns rather than the public interest.51 That their membership was significantly drawn from the local landed elite, rather than working class voters who might benefit from jobs at the new power station was clearly noteworthy. Local politics and national decision making were, therefore, heavily influenced by ideas of landscape preservation and rural protection to a greater degree than is often appreciated.

As the 1980s wore on, a series of localised campaign organisations became active in Wales in opposition to a second generation of nuclear power stations. Such groups included CND Cymru, the Green Party, parts of Plaid Cymru, and localised groups in areas at risk of development, such as People Against Wylfa B (PAWB) in Anglesey and the Preseli anti-nuclear group in South West Wales. The role of the Chernobyl accident in this change of emphasis has recently been discussed by Martin and Wiliam, further demonstrating how a nuclear meltdown in the Ukraine had the potential to reshape political debates both in the USSR and abroad.52 Yet anti-nuclear protestors were just one interest group within Wales, and many contemporaries viewed the building of Trawsfynydd and Wylfa nuclear power stations as having a significant and overwhelmingly positive impact on local communities. The arrival and housing of the many workers needed to build the stations required the planned (and unplanned) construction of various amenities. For instance, Irish workers at Wylfa constructed Wales' most

northerly Catholic Church at Cemaes Bay to fulfil their spiritual needs. 53 This social and cultural aspect to utility construction needs to be explored in greater depth than is the case in the existing literature.

CONCLUSION

Any future research into nuclear power in north 20 Wales should explore the impact on services provided by local authorities and similar bodies and examine how they affected local businesses and attracted new industry to their area. Notably, nuclear power was fundamental to the development of "Anglesey Aluminium", once the largest commercial employer in north Wales. The construction of the power stations in north West Wales had a clear physical and human impact on various local communities. Existing literature does not provide any detailed chronology or analytical narrative of events that shaped the station's conception, construction, and operation. The development of atomic power generation is often discussed as an example of political action and within the broad context of post war economic change, but never on its own terms. Additional work is necessary to better understand the social, economic, cultural, and political impacts of these stations within the landscapes in which they were constructed. Furthermore, a deeper examination is needed of how the stations interact with the landscape within which they are situated.

As a survey of accessible evidence, this arti-21 cle demonstrates the significant quantities of archival material and newspaper evidence that exist, much of it focused on station construction and operation. Regional archives and repositories hold designs and planning information that suggest the power stations were catalytic influences on local communities and infrastructure. While primarily an examination of north Wales, much evidence is often created by UK-wide, government bodies, or is linked to party-political activity in the locality, where material evidence primarily reflects the views of an elite, politically

53 North Wales Chronicle, 3 January 1964.

^{50 &}quot;Council minutes", 31 January 1964, Campaign for the Protection of Rural Wales (CPRW)papers, 2/2, NLW, Aberystwyth.

^{51 &}quot;Document in collection 'Proposed nuclear power stations, Deeside and Edern'", date unknown (file range 1958-1975), CWE papers, B16, NLW, Aberystwyth.

⁵² Martin and Wiliam, "Politicising Chernobyl", 273-292; Serhii Plokhy, Chernobyl: History of a Tragedy (London: Penguin, 2018), 301-316.

active minority. Collections created by groups like the CPRW demonstrate how the link between preservation of the natural landscape and protest remained important. The limited research undertaken for this study has suggested that concerns about community health were a post construction discourse. Clearly there is a substantial source base for a significant project on the history of nuclear power generation in north Wales. That such evidence exists, yet so little work has been undertaken, suggests that while the wider history of power generation has been neglected, nuclear power is perhaps more so.

22 Clearly, post-war Britain was desperate to remain at the centre of technological advance. Both Trawsfynydd and Wylfa, constructed between 1959 and 1971, represented an embracing innovative technology in an area that was still undergoing early-stage electrification. Likewise, this process stimulated significant change in north Wales' built and rural environment. Nuclear

power stations, which changed the very function of their environments, were modernist infiltrators into assumed rural landscapes. Using the power station as a prism, future projects might examine not only their history, but also how they required the destruction of the rural countryside and the construction of amenities including housing, transport links, and even reservoirs. Nuclear power stations transformed the natural landscape, which was reshaped to accommodate them. Intriguingly, before the 1980s it was often this, rather than any fear of radiation or concern for community health, that underpinned the most heated political debates. This is a complicated and multifaceted area of research, with a number of interactive and interdependent themes that could be examined. Future projects may choose to examine these issues as a comprehensive, overarching project, or focus on more specific themes for research. Clearly, there is opportunity for a great deal of scholarship to be undertaken.

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