



PROJECT MANAGEMENT

LCBB5005



ASSESSMENT 1: PROJECT PLAN ESSAY

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BACKGROUND OF HINKLEY POINT C PROJECT

According to Gov (2018), the construction of Hinkley Point C's nuclear power plant promises to generate a sustainable and cost-effective supply of energy over the course of nearly six decades, sufficient to accommodate the energy requirements of almost six million households. Moreover, it is anticipated that this enterprise will also create an estimated over 25,000 new employment opportunities. The undertaking represents a noteworthy advancement in the movement towards an energy system with reduced carbon output and will facilitate the realization of the climate pledges with respect to expenditures incurred. The British government gave approval for reduced prices on the electricity generated by the nuclear plant in October 2013. However, construction work commenced in 2017, following the receipt of the approval in September 2016.

While the construction is progressing, they are putting the efforts to ensure that the gains from the project can be enjoyed by individuals and companies from all regions across United Kingdom. There are various advantages that encompass creating more job opportunities for residents, forming a stable regional system for supply and strengthening new learning institutions and certifications. (EDF, 2023) The current development necessitates a closer attention to the fundamental elements that make up the project, such as stakeholder groups, standards or potential problem areas. Hence why, furthermore there will be analyzed and reviewed the initial scheme of the project in order to underline the reasons for the significant time and financial changes.

PMBOK

For a better analysis of Hinkley Point C project, there will be utilized The Project Management Body of Knowledge (PMBOK) which provides the standard and required guidance that is universally acknowledged by the project managers. A formal documentation which details established regulations, procedures and methodologies is what constitutes a standard. Similar to other areas of expertise, the guidance elucidated in this standard has progressed through the years thanks to reputable project management professionals who have lent their insight towards perfecting the guideline. (Institute, 2013)

PMBOK COMPONENTS

PROJECT INTEGRATION MANAGEMENT

According to Institute (2013), Project Integration Management coordinated the different activities within the groups to achieve project goals. Integrating different elements in project managements entails uniting, communicating and implementing integrative actions that are vital for effectively executing projects up to their completion. Regarding HPC project, the integrated management system will be improved consistently for various phases and will incorporate user feedback and insights gained from industry projects. Documented

processes have been quickly developed under an environment of resource build up and evolving organizational responsibilities.

EDF applied for the Hinkley Point C plant with the UK's Infrastructure Planning Commission in October 2011. HPC received a site license from the UK's nuclear regulator in November 2012, and one month following that approval, the EPR design was endorsed for use in the UK. In March 2013, the government granted Development Consent Order to the project. The project implementation plan (PEP) has been released in early 2013 and after that they have been working on improving the collaboration between project groups and their assigned designer. This led to the creation of interface agreements. However, the management system processes have not been fully tested, but there is enough evidence to prove that they exist and are suitable for the project's initial advancement. (ONR, 2013)

EDF and CGN made a strategic joint investment agreement for Hinkley Point C in October 2015. In July 2016, the project received the final investment decision (FID). In September 2016, the UK Government gave its approval for the HPC deal and allowed for the construction to proceed. (NSEnergy, ND)

PROJECT SCOPE MANAGEMENT

The activities required to produce the outputs and outcomes specified in the business cases are referred to as the project's scope. To clarify, the scope needs to be developed based on the requirements stated and match the criteria. A project manager must have a precise comprehension of the project's scope and communicate it effectively to the team and stakeholders. (Simon, 2018)

PROJECT TIME MANAGEMENT

Project Time Management involves managing the completion of the project within the designated time frame. (Institute, 2013) The project was planned to be launched in 2017. The deadline was postponed from 2015 to 2025. The original schedule for this has been postponed once again to 2027, which is ten years after the original plan. However, in the light of recent reports, the nuclear power station has been projected not to be up and running until 2036, a delay of 11 years from its initial target date of 2025. (Cossins-Smith, 2023)

PROJECT COST MANAGEMENT

Compared to renewable energy sources like wind and solar energy, nuclear projects have unique economics. The initial costs of renewable energy projects are higher as they take longer to generate revenue and their eventual decommissioning calls for special financing arrangements. Due to these factors, prices increase and financing options are limited. Over an extended period, factors like estimating the likely cost of building materials become complex issues that necessitate proper care. (NAO, 2017) As stated by Cossins-Smith (2023), EDF's project is expected to exceed its previous budget estimate due to inflation, which could drive its cost to almost £33bn. The executives disclosed during their last presentation that they've observed a significant increase from the last estimation, May 2022 (£26-27 bn). The firm is constructing the facility in the south-west of England and is funding most of its expenses. However, one third of the project is owned by China's General Nuclear Power Group (CGN). The project has sparked great debate ever since it was initially revealed. It has encountered several important issues, including high levels of electricity production costs, safety concerns for the environment, risks to national security, and financial liabilities for both investors and taxpayers. Two directors of EDF resigned in 2016 in opposition of the construction of Hinkley just prior to an important board vote.

PROJECT QUALITY MANAGEMENT

Project quality management comprises the procedures and undertakings within the executing entity that identify the policies, aims, and obligations relating to quality, thereby ensuring that the project meets the requirements for which it was initiated. Within a project's setting, Project Quality Management employs policies and procedures to establish the quality management system of the organization and facilitates ongoing process improvement activities on behalf of the performing organization, as deemed necessary. (Institute, 2013) Upon examining the planning, construction, and initial production procedures of the Hinkley Point C nuclear facility located in Somerset, it has been revealed that certain quality control measures are not being consistently applied, thereby rendering some of these practices substandard. ONR reported the absence of clear project-wide leadership and quality organization and suggested the company to review its current project assurance methods and pinpoint areas which require modification. (McIntyre, 2018)

PROJECT HUMAN RESOURCE MANAGEMENT

The management of the project team is organized, led, and controlled by the Project Human Resource Management processes. The project team consists of individuals who are designated specific roles and duties for the successful completion of the project. Team members for a project can have diverse skills, work on a full or part-time basis, and their inclusion or exclusion from the team might change during the project's advancement. The members of a project team can also be known as the project's staff. All project team members can benefit from being involved in project planning and decision making, even if they have specific roles and responsibilities assigned to them. Involving team members in the planning process incorporates their knowledge and boosts their commitment to the project. (Institute, 2013)

Hinkley Point C is significantly benefiting the local region already. Approximately £3 billion has been used to support local businesses within the region, creating a vast number of jobs and providing apprenticeships for people to pursue new careers. They will be launching new training programs and facilities in the upcoming months for everyone to maximize future opportunities. HPC will create new training programs and facilities, including the Construction Skills Centre, Electrical Centre of Excellence and Welding Centre of Excellence to support people of all backgrounds and skill levels in securing long-term careers. (EDF, ND)

PROJECT COMMUNICATION MANAGEMENT

Project Communications Management involves the necessary steps to effectively plan, create, collect, store, distribute, manage, supervise, and ultimately handle project information in a timely and appropriate manner. Project managers primarily communicate with team members and project stakeholders, both internal (across various organizational levels) and external. Communication fosters successful project outcomes by bridging the gap between stakeholders who come from different cultural and organizational backgrounds, possess diverse levels of expertise, and hold differing perspectives. (Institute, 2013)

PROJECT RISK MANAGEMENT

The domain of Project Risk Management incorporates various tasks, such as identification of potential risks, conducting analytical evaluations, formulating appropriate contingency responses and effective execution of measures aimed at controlling and minimizing project related risks. The aim is to enhance the favorable outcomes and advantages, while lessening the chances and consequences of unfavorable occurrences that may occur throughout the project. (Institute, 2013) Regarding the HPC one of the

potential risks is that there is no proven reactor design, hence why the project is facing difficulties. The pressurised water reactor that they are using wasn't successful anywhere in the world. This technology is causing delays and increasing expenditures. In terms of energy, there should be created and sustained other methods of securing it, for avoiding the possibility to ask for extra help. The government would be less dependent on electricity generated from HPC if additional approaches for energy security were implemented. By doing this, a stronger position could be achieved in case investors wanted to renegotiate the terms. (NAO, 2017)

PROJECT PROCUREMENT MANAGEMENT

Procurement means obtaining goods and services. It is often interchanged with words like purchasing, acquiring goods, and contracting, for hiring services or organizations. Defining a procurement strategy/plan is crucial for projects that require extensive procurement. This will detail the plan for the project. (Simon, 2018) In order to ensure the successful construction of the nation's first brand-new nuclear power station in 20 years, HPC intends to work with UK businesses. Its goal is to ensure that UK manufacturers have everything they need to win their fair share of contracts. There are numerous businesses actively engaged in the project, either as preferred bidders or as active participants. Others have created joint ventures to work together on the project. The project received interest from more than 4,000 nearby companies, and contracts worth up to £3.2 billion have been signed. (EDF, ND)

PROJECT STAKEHOLDER MANAGEMENT

Engaging with stakeholders is critical for successful project management, and it cannot be ignored as widely accepted. Identifying and actively involving all stakeholders is crucial for a project manager. Ignoring them can lead to problems in the project because they do not disappear. In the past, it was common to discuss managing stakeholders instead of involving them. (Simon, 2018) According to GOV (2018), there has been implemented a Stakeholder Reference Group for HPC that aims to evaluate how developing the new Hinkley Point C power plant affects Wales.

PROJECT'S RESOLUTION

As indicated in the recent report issued by the National Audit Office, the agreement made by the Department for Business, Energy and Industrial Strategy concerning the Hinkley venture has bound individuals into a position that is both precarious and costly. It highlights that there are unclear and undermined strategic and economic advantages associated with the project. The prevailing sentiment among stakeholders is that UK would benefit from incorporating some fresh nuclear energy sources into its power infrastructure in order to effectively reduce gas emissions at an optimal cost. The finalization of the deal for Hinkley Point C in 2016 did not present a compelling case for economic viability, according to the department's tests. The assessed value-for-money highlighted uncertainty surrounding the project's future success and revealed that if less plausible projections have been taken into consideration (such as expenses related to renewable energy sources and fossil fuels), it would have resulted in a conclusion that the agreement would not have been economically viable. (NAO, 2017)

Defining the project initially is what determine whether to approve or reject the project start based on its business case. It's too soon to determine if the project is successful or not yet. However, this stage in the project sets the groundwork for future success or failure.

Errors during the beginning stages of a project can result in a high likelihood of failure. After a rigorous analysis, it has been demonstrated that the following factors have led Hinkley Point C project to failure: the required work for the project is not defined and comprehended well; the technical specifications lack clarity; the cost, schedule, or benefits projections are excessively hopeful; the risk assessment is not fully comprehensive or has errors; the project strategy planned is not suitable; not enough attention is given to cash flow and funding; stakeholders' interests and concerns are disregarded. (Lock, 2013)

RECOMMENDATIONS

In order to create effective oversight and governance arrangements for the project, there should be taken into consideration the best practices around the world. By analysing them there can be drawn some recommendations that can support the development of a feasible project, as stipulated by NAO (2017):

It is important to inform those in charge about the potential consequences of promising things to investors. This can reduce their ability to adapt and respond to new situations. The government must communicate a commitment to agreeing on a deal to give private investors the confidence to participate in negotiations and finance initial development costs. As discussions go on and agreements are made, the government becomes less adaptable to making changes. The drawbacks of less adaptability should be considered alongside the advantages of proceeding with the agreement when expressing the message to decision-makers. In contrast, it is advisable for the organization to regularly review the rationale behind its endorsement of nuclear energy. Alterations in technology, as well as macroeconomic and political determinants may enhance or diminish the efficacy of the nation's strategic justification for nuclear power investments, leading to a need for a revised approach.

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