

### Central Bedfordshire Council

# Sourcing the power for housing in an electrical desert!

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#### Think Biggleswade

- Strategic position
- Heart of the Oxford Cambridge Arc
- East Coast Mainline
- A1 Corridor
- Understanding power demand
- Existing constraint
- Planning for growth
- Garden Village



In 2020 London's best value commuter towns saw Biggleswade top the list with an average house price of £300,000 and a 44-minute journey to work

### Progressing a large housing development East Biggleswade Garden Village

- UK Regeneration was taking a new approach
- 1,500 homes meeting a range of needs
- 65ha of open space and leisure uses including 48ha of country park
- 2ha commercial land
- Primary School
- Healthcare facility
- Community facility

#### East Biggleswade Garden Village



#### East Biggleswade Garden Village



A unique place we are proud of



A high quality, healthy place to live, work & play



A green and natural place for all to enjoy



A connected and well integrated place



A place with strong community roots



A place that is sustainable and fit for the future

#### What questions do we even ask?

- Started unravelling the power constraints story
- No one knew the problem or the solution
- Big ask of any local authority why our problem?
- Gathered information & knowledge
- Built network of people
- Built evidence base
- Scoped resources
- Front funding CBC

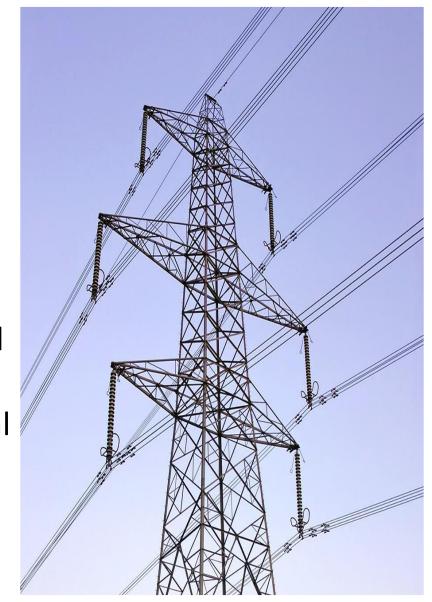


#### Picture became clearer



#### Grid connection challenges

- We were aware we had power capacity issues
- NIC report 'Partnering for Prosperity' confirmed the need for action
- Distribution Network Operators investment required
- Thinking Big to address the issue we needed internal support & leadership
- Opportunity Housing Infrastructure Fund



#### Partnership Approach

The answer to not knowing what to do

- Built confidence in our funding partner
- Built expertise in our team
- Gave us confidence in our funding decisions
- Both a barrier to progress & unlocked blockages
- Had to learn a different language
- Had to communicate on many levels

#### Power Investment Options in 2019

- **1. Do minimum** –Upgrade existing power infrastructure 10 MVA for £10.6M –insufficient
- 2. **Do less** –New primary substation –20 MVA for £14M capacity soon exceeded & more investment required
- 3. Preferred—£48M New supergrid transformer substation 132kV
  - 240 MVA stepped transformation –40MVA expandable to 240MVA
  - Most cost effective + funding recovery opportunity
  - Unlocks capacity across a strategic area
  - Easily expanded in 40 MVA stages at low cost
  - Contribution from National Grid c.£15M
  - Deliverable by 2024
  - Mitigates commercial power needs risk

## Future Proofing Power Options - How Much Power?

#### Assumed high @8KV per home

	2019/20	0	0	0.0
	2020/21	60	60	0.5
	2021/22	87	147	1.2
	2022/23	210	357	2.9
	2023/24	155	512	4.1
	2024/25	285	797	6.4
	2025/26	380	1,177	9.4
	2026/27	480	1,657	13.3
	2027/28	506	2,163	17.3
	2028/29	443	2,606	20.8
	2029/30	400	3,006	24.0
	2030/31	400	3,406	27.2
	2031/32	400	3,806	30.4
	2032/33	400	4,206	33.6
	2033/34	400	4,606	36.8
	2034/35	400	5,006	40.0
Beyond 2035		2,762	7,768	62.1

#### Where are we now?

- Complete February 2025
- Looking at wider implications & opportunities
- Inward investment
- Sustainable power generation
- Funding recovery & recycling
- Garden Village

#### Lessons Learned and tips!

- Be Brave! Be determined!
- Think Big! Think Strategically!
- Maintain a sense of humour! Securing support took a significant amount of time and effort
- Data Data Data! The lack of a comprehensive evidence base to understand infrastructure needs at a local level is a barrier to effective strategic planning
- Focus on relationships essential to getting traction and unblocking sticking points
- Be honest! About the time, effort and risk involved
- Be clear on who decides establish governance early
- Bring your stakeholders with you even when it's hard!



### Questions?

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