#### **Background**

Councillors will recall that in the October F and M Committee meeting, the Clerk advised that she would be talking with Equans and partners about the possibility of placing Solar Panels on the roof of the Town Council and Theatre buildings.

The Clerk met with Southern Staffordshire Community Energy initiative (aligned with Cannock Chase Solar project which is part of Zero Carbon Rugeley). In essence there are two ways in which we could be supported in having solar panels on the roof to reduce the cost of electricity for the Town Council and the Theatre:

#### **Proposed Design**

The system would place solar panels on the SE facing pitched roofs of the Town Council building and the Rose Theatre. In addition, there would be an A frame base on which would be mounted solar panels and this would sit on the flat roof SW facing over the Landor Suite and panels on the SW pitched roof over the theatre auditorium. The system would not include storage but there may be scope to include storage (addition £15,000 approx).

#### **Community Benefit Model**

The Power Purchase Agreement is usually agreed for a 20-year term. So, the unit we pay for the solar energy incrementally pays back the investors their investment plus a modest amount of interest. The surplus is distributed for community benefit e.g., fuel poverty interventions or EV charge points. After the 20-year term, ownership of the system is transferred to the building owner. With this model there is no upfront cost to the Town Council. In addition, all maintenance and upkeep is covered by the providers.

#### **Self-Funded Model**

To purchase and install the panels on the 4 roofs will cost between £55,000 - £60,000 initial outlay. In addition, there are ongoing maintenance and service costs. However, with this system, we would not pay any rate for the electricity generated by the panels.

#### **Roofs**

The pitched roofs should be capable of holding the panels. However, the flat roof over the Landor Suite does need to be replaced. It is anticipated that this would be at a cost of around £50,000 and this work would need to be done whichever of the models was chosen.

Please see diagram, graphs and pictures below for condensed explanation

59.295<sub>kW</sub> System Size £10,117 Estimated Annual Electricity Bill Savings £65,225 Total System Price £65,225 Net System Price



### Your Solution

Solar Panels SunPower 59.295 kW Total Solar Power 177 x 335 Watt Panels (SPR-P3-335-BLK) 51,216 kWh per year

# System Performance



62% Energy From Solar

# Community Benefit Model

Investors are offered opportunity to invest with a 3% return

SSCE then install the solar panels and retain ownership of them – we charge nominal rent for the roof space.

We get a reduction in kilo watt hour cost of energy saving approx. 20p per unit = approx. £5,000 per year

Any additional energy created and not used is fed back into community projects e.g. referral programme helping community understand how to combat rising costs / instal electric vehicle charging units.

## Self-Funded Model

The Town Council buys the solar panels and pays for the installation at a cost of around £55k.

There will be ongoing operating and service costs involved in this.

All energy produced by the panels will be free to use and will be boosted by tradition electricity supply in times of high demand.

Councillors to note that the flat roof of the Landor Suite does need replacing which could be done to coincide with the installation of solar panels. This is a separate contract and will cost us around £50,000 but will improve insulation to the Landor Suite.