Number/code: OM/E17

Title: OPERATING WITH GENERATORS

Guidelines section:

	Governance	X	Operational management

	Context of the event		*Procurement*
X	*Event*		*Mobility and logistics*
	Stadium management		

Description:

Generators consume a baseline of fuel even if they are not employed at capacity, and the 'fuel consumed' versus 'power generated' relationship is not linear. Efficiency is therefore largely determined by load. A good rule of thumb is that around 70-80% load is perfect (optimum). Going downwards, anything between 80% and 50% load is still good (reductions in efficiency are marginal), but as you go down from 50% to 25% efficiency reduces. The 'danger zone' is below 25% with low efficiency. Below 10% you need to really start thinking about better ways to manage your power.

Specify energy requirements correctly by understanding what power you need and working with your supplier to create efficient solutions. For example, create fuel cost savings by using a number of generators in sequence that operate only in times of peak demand, rather than running one large generator continually.

Share generators across the site for example power for toilets, multiple catering outlets and field lighting, could all be driven from one source.

In addition, the plan of the energy use by creating an energy use map for your whole event could be considered a good practice, for example through the following activities:

- Know demand peaks and troughs and what levels they will reach.
- Know where energy is consumed; stage, lighting, campsite, catering, heating.
- Specify energy requirements correctly by understanding what power you need and working with your supplier to create efficient solutions. For example, create fuel cost savings by using a number of generators in sequence that operate only in times of peak demand, rather than running one large generator continually.

Environmental benefits

Operating at optimum load with generators allows reducing emissions.

Economic benefits

Cost savings related to maximum efficiency.

Applicability and replicability potential

The project can be easily replicated.

Source

RESOURCE EFFICIENT SCOTLAND (p.13-14)