

ARCoES CE Attributes and syntax

Choice Experiment Attributes and levels

| Attribute | Description | Levels |
|-------------|--|-----------------------------------|
| Duration | Duration of power cut in minutes or hours | 20 mins, 1 hour, 4 hours, 8 hours |
| Time of day | Period of the day | Peak, Off-peak |
| Day of week | Period of week | Weekday, Weekend / Bank Holiday |
| Season | Period of year | Winter, Not Winter |
| Price | One-off amount to pay to avoid the power cut | £1, £5, £10, £25 |

Ngene syntax used to generate Choice Experiment (including priors from pilot runs)

```
Design
;alts = Option1, Option2
;rows = 16
;block = 2
;eff = (mnl, d, fixed)
;model :
U(Option1) = b1 + b2(n,-0.00452,0.01638)*A[0.33,1.00,4.00,8.00] + b3(n,-
0.04889,0.1625)*A*B[0,1]
+ b4(n,-0.02233,0.19416)*A*C[0,1] + b5(n,0.75408,0.25818)*A*D[0,1] +
b6(n,0.03478,0.01357)*E[1,5,10,25] /
U(Option2) = b2*A + b3*A*B + b4*A*C + b5*A*D + b6*E
;cond:
If (Option1.A = 0, Option1.E <> 3) ,
If (Option1.A = 3, Option1.E <> 0) ,
If (Option2.A = 0, Option2.E <> 3) ,
If (Option2.A = 3, Option2.E <> 0)
```

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