1   Q.   Further to response to Request for Information NP-NLH-072:

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3   Professional Services costs for Information & Operations Technology are forecast to

4   increase from $620,000 in 2016 ($19,000 + $601,000 = $620,000) to $1,163,000 in

5   2019T. Please provide full details of this $543,000 increase, together with a list of

6   actual and forecast professional service expenditures, by service provider and year,

7   for the period 2016 through 2019T.

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10   A.   Professional Services[1] costs for Information & Operations Technology are forecast

11   to increase by $543,000 from 2016 Actual to the 2019 Test Year (TY). This increase

12   is primarily due to additional software maintenance costs.

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14   Please refer to Table 1 for details by system.

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[1] Professional Services includes software maintenance and consultants costs.

Table 1 Professional Services Costs 2016 Actual to 2019TY ($000s)

Professional Services	2016 Actual	2017 Forecast	2018TY	2019TY	Primary Vendors
Backup Software	13	14	14	14	IBM
Billing Support	69	65	175	172	Landis+Gry, Denovo, Itron, Creditron
Energy Management System	214	329	315	331	OSI, OSISoft
Engineering Support and Geographic Information System	66	71	109	110	ESRI, Cyme
Lightning Tracking System	8	8	8	8	Vaisala
Load Forecasting	0	0	69	71	Hatch
Operating System Support	32	41	41	42	IBM, VMWare
Planning Software	38	37	23	23	Power Line Systems, Ventyx
Safety Code Application	23	23	32	32	Safe Engineering, Taproot
SCADA System - Diesel Plants	6	6	6	6	Schneider
Security Software	11	15	15	15	Tripwire
Transmission Support	12	149	149	153	Siemens, OATI
Water Management	128	118	118	122	Ventyx, Hatch
Consulting Services		10	62	62	Not selected
Total Per Year	**620**	**886**	**1,136**	**1,163**	