

# efficiency bulletin

September 1, 2016

## Efficiency Bulletin: 16–24 Streamline Regulatory Organizations

Streamline licensing and compliance groups to accomplish required tasks at a reduced cost.

**Addressees: Chief nuclear officers, NEI APCs and INPO APCs**

**Issue: RE-9, Streamline Internal Licensing and Regulatory Organizations**

### Summary of Efficiency Opportunity

- Desired end-state—Licensing and compliance groups accomplish required tasks at a lower overall cost.
- Value proposition (vision of excellence)—Licensing and compliance groups will focus on priority tasks and eliminate low-value activities, resulting in efficiency gains and increased focus on regulatory issues. Benchmarking associated with this efficiency bulletin revealed that many utilities have the opportunity to potentially realize over 20 percent savings.
- Why it is important?—Licensing and compliance groups have evolved differently in the industry and are of varying sizes doing essentially the same work. A standard task list with defined man-hours (Attachment 1) has been developed that provides an opportunity for utilities to reduce the number of full time equivalent (FTE) workers devoted to licensing and compliance while still performing required tasks. Attachment 2 provides a companion listing of recurring tasks. Attachment 3 is a sample organization chart for consideration. There is no expectation that companies implement this organization structure as it is shown.

### Relevant Standards

- No relevant standards

Color Code: Green

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NUCLEAR ENERGY INSTITUTE

The Nuclear Energy Institute is the nuclear energy industry's policy organization.

This bulletin and additional information about nuclear energy are available at [nei.org](http://nei.org).

**1201 F Street, NW  
Washington, DC 20004  
[NEI.org](http://NEI.org)**

## Guidance

- No relevant guidance

## Recommended Industry Actions

- This efficiency bulletin will implement phase 1 of streamlining licensing and compliance groups. A subsequent efficiency bulletin will be developed based on the results of this efficiency bulletin.
- Sites are encouraged to implement Phase 1 activities by Dec. 31, 2016.
- Phase 1
  - Each company should perform an assessment of their licensing and compliance tasks and man-hours against Attachments 1 and 2, "nominal" drivers, and man-hour estimates
  - If a company performs fewer tasks, the site should evaluate why and report best practices to NEI. If a company performs more tasks, it should report to NEI if it believes something should be added to the "nominal" list.
  - If a company's man-hours for a task are greater than the "nominal," sites should investigate and determine why. It may be appropriate to revise the current approach for performing that task. If a company's man-hours for a task are much less than the "nominal," sites should describe how it is achieved and document that best practice on the Attachment 4 form.
  - Transmit best practices forms to NEI's Chris Earls ([cee@nei.org](mailto:cee@nei.org)) by the end of 2016.
- Phase 2
  - The efficiency bulletin development team will revise the driver/man-hour list based on best practices and will issue a new efficiency bulletin in the first quarter of 2017. Companies will be encouraged to move their regulatory/compliance resource loading toward the revised man-hour estimates in that efficiency bulletin.

## Change Management Considerations

### *Industry Activities*

- Industry webinar to provide background for initiative and provide an open forum to clarify expectations and ask questions. Webinar information can be found at <https://web.inpo.org/Pages/Nuclear-Promise-Issues.aspx>.
- Discuss at the NEI Regulatory Issues Working Group, regional meetings and industry conference calls.

### *Company Actions*

- A comprehensive change management plan should be developed and implemented for any changes resulting from the Phase 1 review. The change management should include training and monitoring.
- The attached task list does not dictate a particular organizational structure. Tasks may be performed on-site or in corporate offices depending on company preference. Two possible organization structures are offered for company consideration.

### Key to Color Codes:

Red: NSIAC initiative – full participation required for viability

Blue: Action expected at all sites, but is not needed for broad industry viability

Green: Utility discretion to implement, consistent with its business environment

#### *Guidrails*

- Continue to fully comply with all regulatory requirements.
- There is risk that if an organization is “streamlined” without full understanding of the scope, some required tasks may be inadvertently missed.

#### **Report Your Site’s Results**

Please report your company’s implementation of this improvement opportunity, including the date of completion. Send this information, along with your company point of contact, to [EfficiencyBulletin@NEI.org](mailto:EfficiencyBulletin@NEI.org).

#### **Industry Contacts**

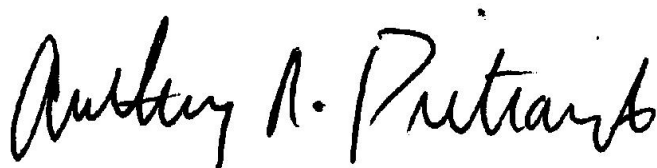
- Industry champion for this issue: Steve Bethay, 423-751-8728, [sjbethay@tva.gov](mailto:sjbethay@tva.gov)
- NEI contact: Chris Earls, 202-739-8078, [cee@nei.org](mailto:cee@nei.org)
- On the web: [www.nei.org/bulletin1624](http://www.nei.org/bulletin1624)

#### **Industry Approval:**

##### **Mano Nazar, CNO Lead**

A handwritten signature in black ink, appearing to read "M. K. Nazar".

##### **Anthony R. Pietrangelo, Nuclear Energy Institute**

A handwritten signature in black ink, appearing to read "Anthony R. Pietrangelo".

## Attachment 1

### RE-009 Streamline Internal Licensing/Regulatory Organization

#### Assumptions:

1. The plant is not a troubled plant, generally operating in Column 1 of the ROP and at least an INPO 2.
2. Major licensing initiatives/projects are not included (e.g., License Renewal, ITS conversion, NFPA-805, Power Uprates, FLEX, Fukushima, etc.)
3. Individuals performing the tasks are assumed to be fully qualified and experienced performers.
4. Resource estimates assume limited effort on governance and oversight and relatively non-aggressive industry involvement.
5. Resource estimates exclude the most senior regulatory affairs manager and administrative assistants.
6. Manhours/FTE are for a Typical 2 Unit Site.

	<i>Task</i>	<i>Scope</i>	<i>Est. Hours</i>	<i>Working Team Notes</i>
				<i>(Contract or Full-Time, Site or Corporate Function, etc.)</i>
1	NRC - Region interface	1 hr/wk interaction with Branch Chief	50	Not counting inspections; routine communication
2	NRC Resident Support	Coordinating resident activities	2050	
3	NRC inspections and assessments preparation and management	Routine Inspections: ISI, RP - (10/yr/site)	450	45 hours for inspections x 10/yr.
		Large Inspections: Graded EP, FOF, CDBI, PI&R, Triennial FP - (2/yr/site)	420	
4	Inspection Issue Support	Resolving potential greater than green issues - (2/site/yr)	200	Work to prevent greater than green findings, does not include Regulatory conferences

## Attachment 1

	<i>Task</i>	<i>Scope</i>	<i>Est. Hours</i>	<i>Working Team Notes</i>
				<i>(Contract or Full-Time, Site or Corporate Function, etc.)</i>
5	Generic Communications (Information Notices, Bulletins, RIS, GL, etc.)		160	8 generic communications requiring significant response @ 20 hours each.
6	Allegations	Investigation performed outside licensing, licensing provides oversight/processing	150	5 allegations @ 30 hours each
7	NRC-NRR Interface		50	Routine communication; not specific license amendment request
8	Rule Implementation	Assumes Reg Affairs role is facilitation	50	Nominal items, excludes issues such as Fukushima
9	ROP Oversight / Performance Indicators		200	e.g., MSPI data entry, NRC KPIs. Not ROP Task Force participation
10	Self-Assessments	Assumes process improvement to the SA/BM; BM embedded in other line items	40	One self-assessment per year, reduction from current practice
11	FSAR Maintenance	Assumes majority of work is performed by Engineering	190	Reviewing FSAR changes, generating changes occasionally
12	TRM/TS Bases Changes (LDCR)	Assumes 3 are by other orgs and 2 are by Licensing	140	3 changes per year @ 10 hours/change; 2/yr @40 hrs
13	Security, QA, EP Plan Changes	Assumes most work performed by Core Groups	40	
14	Manage company posture on regulatory issues - drop-ins, regions and NRR	3/yr/site	330	

## Attachment 1

	<i>Task</i>	<i>Scope</i>	<i>Est. Hours</i>	<i>Working Team Notes</i>
				<i>(Contract or Full-Time, Site or Corporate Function, etc.)</i>
15	Procedure and Policy management	4 Licensing Procedures per year at 40 hours each - 3 Licensing Guidelines @ 10 hours each - Review procedure from other departments	190	
16	Routine reports and correspondence		240	See routine report attachment. The routine correspondence list assumes Licensing is not responsible for submitting Special Nuclear Material (SNM) reports and Licensed Operator Training and Medical.
17	Commitment management	This is commitment database management	48	4 hours/month, no INPO tracking
18	LERs and non-routine condition-based/special reports		280	5 per year @ 40 hours each; one significant @ 80
19	Part 21		40	Varies by utility where this is performed, assumes majority of work is performed by Engineering
20	License amendments and associated RAIs (includes Security, EP, QA)	Hours assume that industry is successful in making process improvements under RE-010; 4/yr/site	1200	Includes smaller changes (e.g., TSTFs) and larger plant-specific submittals (e.g., many risk-informed submittals), but excludes major project submittals such as power uprates, license renewal, NFPA-805
21	Document validation process and packages for NRC submittals	Peer checks and validation package development primarily for LARs submittals	600	

## Attachment 1

	<i>Task</i>	<i>Scope</i>	<i>Working Team Notes</i>	
			<i>Est. Hours</i>	<i>(Contract or Full-Time, Site or Corporate Function, etc.)</i>
22	Code Relief and Alternative requests		270	3 per year @ 90 hours per
23	Exemption Requests		60	1 per year
24	NOED	0.5 actual, 2 close calls; can be largely eliminated through risk informed regulations (TSTF 505, initiative 4B)	60	1 per year
25	Operability/Reportability consultations and regulatory analysis	Does not include CAP reviews	360	15 hours per occurrence, twice per month
26	Support site safety committee and other boards	Includes: NSRB, Plant Review Board, CARB, SARB, NSCMP; this may be impacted by RE-012 - Redundant Oversight	400	Off/On-site boards, corrective action boards; HU boards; review meetings; Maintenance Rule Expert Panel, Oversight Committees, Many EC reviews (at 30%/70%/100%), Config management Review Board (CMMRB), Mod Review and Prioritization Team (MRPT), Etc.
27	Licensing basis interpretations		500	Assume 2 hours per day providing various information to customers
28	Monitor potential regulatory changes and OE	Review regulatory subscription services, etc. identify potential impacts : Not influencing change, influencing change captured in item 31	255	
29	Maintain NRC postings		10	
30	Licensing Performance Indications (internal/utility/fleet)		100	Licensing indicators

## Attachment 1

	<i>Task</i>	<i>Scope</i>	<i>Est. Hours</i>	<i>Working Team Notes</i>
				<i>(Contract or Full-Time, Site or Corporate Function, etc.)</i>
31	BWR and PWR Owner's Group Support		150	4 meetings per year for licensing subcommittees
32	NEI Support	This does include influencing regulatory; RIWG, RITF, ROPTF, other NEI sponsored activities	480	Input into rulemaking or other regulatory proposals, participation in working groups; 30 hours/meeting 16 times per year
33	RUG Support		140	Includes offsite RUG meetings and conference calls
34	Compliance with non-NRC regulations such as NERC/NEIL/ANI, Etc.		40	Responsibilities vary considerably among utilities
35	NOS audit and CAP support	Includes CAP review and screening meetings, does not include management meeting	520	2 hr/day
36	Manage Budget and NRC fees		32	Four hours per quarter
37	Contract management	Contract management for licensing support services	20	2 hours per month
38	Outage Support	Outage support included in adder assumptions; this is non-licensing outage support	580	1 outage/year. 3 people/4 wks
39	ISFSI Support	Includes routine submittals; manhours are for user group/industry meetings and specific inspections	80	Would be a major project upon initiation, becomes routine once installed
40	10 CFR50.59 / 72.48 Program Maintenance	This item includes process ownership and training only	120	For ownership, <i>oversight and execution</i> of the program, estimates would be much higher



Attachment 1

	Task	Scope	Est. Hours	Working Team Notes
				(Contract or Full-Time, Site or Corporate Function, etc.)
41	RCE/ACE team support		160	2/yr, 80 hrs each
	<b>Sub Total Man-Hours</b>		<b>11455</b>	

**Benefits and Training**

Calculation=(**subtotal**/2080)\*628

**3459**

628 hrs/worker: Holidays - 88 hrs, PTO - 300 hrs, Training - 40 hrs, Miscellaneous Activities (ERO, CAP execution, etc.) - 200

**Total Man-Hours**

Calculation=(**total**/2080)

**14914**

**7.2**

**FTE**

## Attachment 2 – Recurring Task List

Section Title	Type of Report	Source of Requirement	Applicability	Timing	Reporting Method	Primary Recipient
Licensee guarantees of payment of deferred premiums	Guarantee of payment of deferred premium	§140.21	Licensee required to have financial protection for each nuclear reactor	Annually	In writing	DCD, NRR, NRO, FSMEM, or NMSS, as appropriate
Fitness-for-duty program performance data	FFD program performance data (for January through December)	§26.717(e)	Subpart N – Recordkeeping and Reporting Requirements	Before March 1 of the following year	In writing	DCD, RO, RI
Emergency Planning and Preparedness for Production and Utilization Facilities	Emergency Drill Exercise Scenario	§50, App. E(F)(b)	Each Licensee at each site shall conduct a subsequent exercise of its onsite emergency plan every 2 years.	Submit exercise scenarios at least 60 days before use in an exercise	In writing	DCD
Technical specifications on effluents from nuclear power reactors	Annual report that specifies the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous 12 months	§50.36a(a)(2)	Operating licensee, and each holder of a combined license after the Commission has made the finding under § 52.103(g)	Annually not to exceed 12 months	In writing	DCD
Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors	Report the nature of the change or error and its estimated effect on limiting ECCS analysis discovered in an acceptable emergency core cooling system evaluation model, or application of such model, that affect the temperature calculation	§50.46(a)(3)(ii)	Licensee of boiling or pressurized water-cooled nuclear power reactor fueled with uranium oxide pellets within cylindrical zircaloy or ZIRLO cladding	Annually/Within 30 days if significant	in writing	DCD
QATR	Changes to the quality assurance program description in the Safety Analysis Report that do not reduce commitments must be submitted to the NRC in accordance with the requirements of § 50.71(e).	§50.54(a)(3)	Operating licensee or combined licensee subject to quality assurance criteria in Appendix B	Annually or 6 months after each refueling outage provided the interval between successive updates does not exceed 24 months	In writing	DCD, RO, RI
Conditions of licenses	Report current levels of insurance or financial security and the sources of this insurance or financial security	§50.54(w)(3)	Power reactor licensee	On April 1 each year	In writing	DCD
Codes and standards/Examination of metal containments and the liners of concrete containments	For each inaccessible area identified, provide description of the type and estimated extent of degradation, and the conditions that led to the degradation; An evaluation of each area, and the result of the evaluation, and; A description of necessary corrective actions	§50.55a(b)(2)	Licensees applying Subsection IWE, 1998 Edition through the latest edition and addenda (Farley and Vogtle only)	Within 90 days of the completion of each refueling outage	ISI Summary Report required by IWA–6000	DCD, RO, RI
Owner's Activity Report (form OAR-1) -	ASME permits the use of the Summary Report of by a Code Case, the new OAR-1.	§50.55a(b)(2)	As committed	Within 90 days of the completion of each refueling outage	In writing	DCD

## Attachment 2 – Recurring Task List

Section Title	Type of Report	Source of Requirement	Applicability	Timing	Reporting Method	Primary Recipient
FSAR	FSAR revisions containing updated information on a replacement-page basis that is accompanied by a list which identifies the current pages of the FSAR following page replacement. The revisions must reflect all changes up to a maximum of 6 months prior to the date of filling.	§50.71(e)(4)	Licensee or applicant	Annually or 6 months after each refueling outage provided the interval between successive updates does not exceed 24 months (Hatch - 6 months after each outage; Farley - 6 months after Unit 1 outages; Vogtle - 6 months after U2 outages)	50.71(e)	DCD
Revised Regulatory Commitment Summaries	Revised Regulatory Commitment Summaries	NEI 99-04, Section 5.1	10 CFR 50.71 (e)	Annually	in writing	DCD
Changes, tests, and experiments	Report containing a brief description of any changes, tests, and experiments, including a summary of the evaluation	§50.59(d)(2)	Combined licenses during period from application to §52.103(g)/Licensee under parts 50 or part 52	Intervals not to exceed 6 months/Intervals not to exceed 24 months	In writing	DCD
Reporting and recordkeeping for decommissioning planning	Status report of decommissioning funding on a calendar year basis	§50.75(f)(1)	Licensee	By March 31 every two years/after §52.103(g) finding for COL licensees	Report	NRC
Financial assurance and recordkeeping for decommissioning	Decommissioning funding plan	§72.30(b)	Each holder of, or applicant for, a license under this part must submit for NRC review and approval a decommissioning funding plan	At the time of license renewal and at intervals not to exceed 3 years	In writing	DCD
License conditions	Annual report specifying the quantity of each of the principal radionuclides released to the environment in liquid and in gaseous effluents during the previous 12 months of operation	§72.44(d)(3)	License authorizing the receipt, handling, and storage of spent fuel, high-level radioactive waste, and/ or reactor-related GTCC waste	Annually within 60 days after the end of the 12-month monitoring period	In writing	SFT, NMSS
Changes, tests, and experiments	Brief description of any changes, tests, and experiments, including a summary of the evaluation of each	§72.48(d)	Licensee and certificate holder	Intervals not to exceed 24 months	In writing	SFT, NMSS
Changes to security practices and procedures	NRC facility clearance update (Standard Practice Procedures Plan or certification that the existing plan is fully current)	§95.19( c)	Licensee, certificate holder or other person having the need to use, process, store, reproduce, transmit, transport, or handle NRC classified information	Every 5 years	In writing	DCD, DNS
Requirements for Mitigation Strategies for Beyond - Design Basis External Events	Status Report	EA-12-049	Licensee	Every 6 Months Following Submittal of the ISG	In writing	DCD
Annual Non-Radiological Environmental Operating Reports	Annual Non-Radiological Environmental Operating Reports	Environment Protection Plan Section 5.4.1	Fleet	Annually	In writing	DCD

Attachment 2 – Recurring Task List

Section Title	Type of Report	Source of Requirement	Applicability	Timing	Reporting Method	Primary Recipient
Annual Radioactive Environmental Operating Reports	Annual Radioactive Environmental Operating Reports	5.6.2	Fleet	Annually	In writing	DCD
COLR	The COLR, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycled to the NRC	TS 5.6.5.d	Fleet	About one month after each refueling outage	In writing	DCD
Steam Generator Tube Inspection Report (PWR)	Steam Generator Tube Inspection Report (PWR)	PWR TS 5.6.10	PWR	180 days after entry into Mode 4 (if there is a SG tube inspection performed)	In writing	DCD
FOCI Five-Year Resubmittal	FOCI Five-Year Resubmittal	NISPOM	Fleet	Every 5 years	In writing	DCD

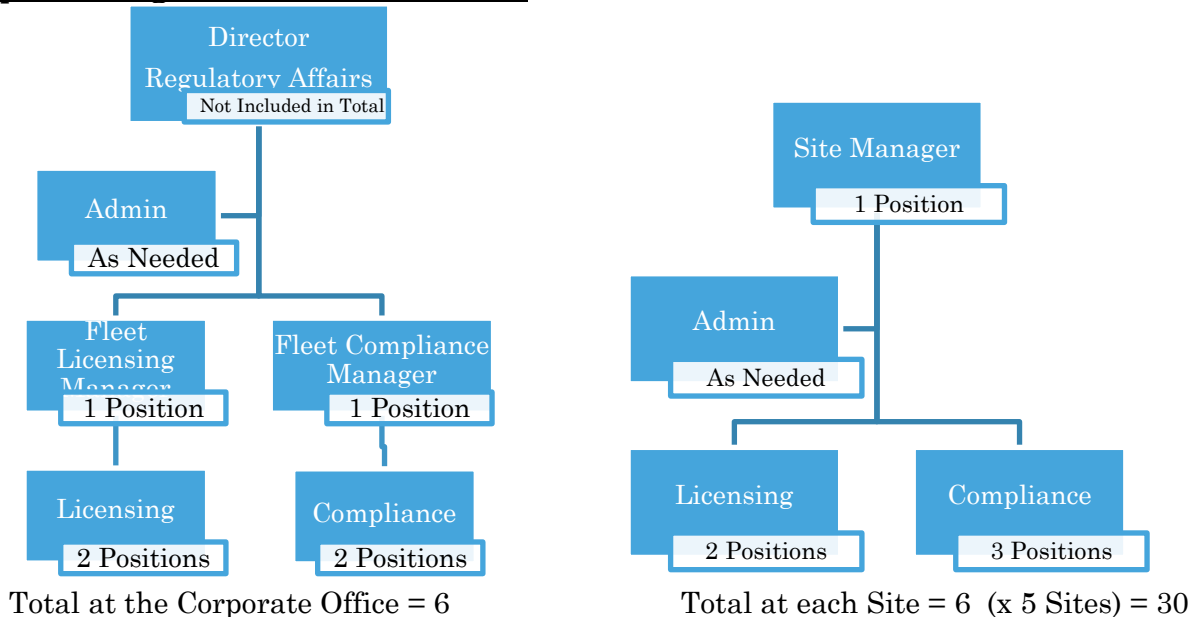
## Attachment 3 – Sample Organization Chart

The following examples illustrate the use of the task description and target staffing level attachment.

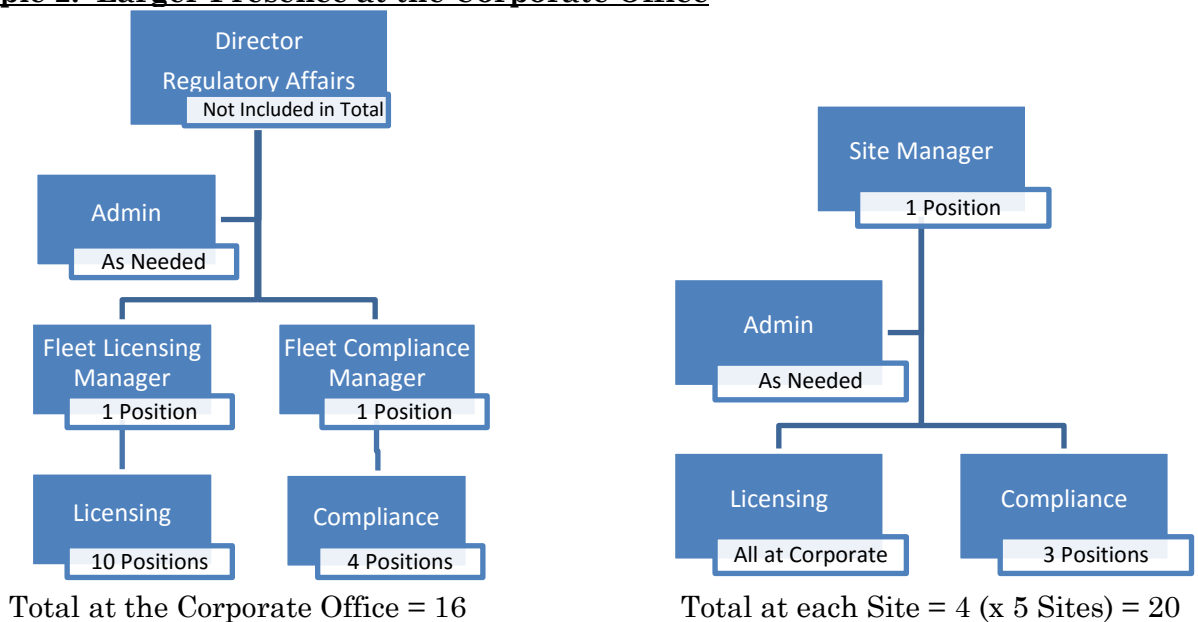
A review of the task descriptions should be made to remove any tasks that are not performed by your organization, and the total hours revised down accordingly. The same should be done to add for any tasks that are not listed that you are required to support. Assume the target staffing level remains the same as shown, at 7.2 FTEs per number of Sites. Assume a fleet with a total of 5 sites (regardless of Units per Site).

**Therefore, target staffing level =  $7.2 \times 5 \text{ Sites} = 36 \text{ FTEs}$  for the Licensing/Regulatory Affairs Organization.**

### Example 1: Larger Presence at the Sites



### Example 2: Larger Presence at the Corporate Office



## Attachment 4 – Best Practice Feedback Form

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